Appendix I

Glossary

A

Analog: A form of transmission employing a continuous electrical signal that varies in frequency and amplitude. Broadcast and phone transmissions have conventionally used analog technology.

ASP (Application Service Provider): A company that offers access over the Internet to application programs and related services, such as financial reporting, payroll, sales order entry, inventory management, shipping, customer service systems, customer relationship management and sales force automation systems, that would otherwise have to be located on a computer or local server. e-applications may be remotely accessed via an ASP.

B

Backbone: A larger transmission line that carries data gathered from smaller lines that interconnect with it. At the local level, a backbone is a line or set of lines that local area networks connect to for a wide area network connection or within a local area network to span distances efficiently (for example, between buildings). On the Internet or other wide area network, a backbone is a set of paths that local or regional networks connect to for long-distance interconnection. The connection points are known as network nodes or telecommunication data switching exchanges (DSEs).

Bandwidth: A measure of spectrum use frequency or capacity. Refers to the speed at which data is transmitted, measured in bits per second (bps).

Bandwidth Gap: The disparity between the computer processor's speed of processing data and the communication infrastructure's speed of transmitting data.

B-ISDN: Broadband Integrated Services Digital Network is a high-speed telecommunications service that can transmit multimedia over the phone line. It uses fiber optic cable and synchronous transfer mode, and is faster than narrowband ISDN. B-ISDN can be used for voice, data, fax, email, full motion video, and video conferencing.

Bit: A bit is the smallest unit of data in a computer. In most computer systems, there are eight bits in a byte and four eight-bit bytes or octets form a 32-bit word. A bit is abbreviated with a small "b".

- **Kilobit:** One thousand bits. Used for measuring the amount of data that is transferred in a second between two telecommunication points. Kilobits per second is abbreviated to Kbps.
- **Megabit:** One million bits. Used for measuring the amount of data that is transferred in a second between two telecommunication points. Megabits per second is abbreviated to Mbps. A U.S. telephone T-1 line normally sustains a data rate of 1.54 Mbps.
- **Gigabit:** One billion bits. Gigabits per second is abbreviated to Gbps. A measure of bandwidth on a digital data transmission medium such as optical fiber.

Bit rate: The number of bits that are transmitted in a given time period, usually a second.

BLEC: A building-centric Local Exchange Carrier, or BLEC, is a company that designs, installs, owns or manages an in-building vertical communications infrastructure that normally runs inside vertical utility shafts from the building's basement to the top floor. The network infrastructure is often described as a riser system. BLECs wire the interiors of buildings for high-speed broadband access.

Broadband: Broadband refers to high-bandwidth telecommunications facilities that provide multiple channels of data. In general, transmitting large volumes of data and video images are broadband applications, whereas voice and text messages are considered narrowband applications. The transmission speeds are generally greater than 1.5 Mbps.

Broadband Access: A transmission that has a bandwidth greater than 1.5 Mbps, usually a T1 speed or greater.

Byte: A unit of information that is eight bits long. A byte is the unit most computers use to represent a character such as a letter, number or symbol (for example, "h", "4", "?"). Four bytes normally constitute a 32-bit word. A byte is abbreviated with a "B".

- **Kilobyte**: A measure of computer memory or storage abbreviated KB or Kbyte. A kilobyte is approximately one thousand bytes.
- **Megabyte**: A measure of computer processor storage and real and virtual memory abbreviated MB. A megabyte is approximately one million bytes.
- **Gigabyte**: A measure of data storage capacity, abbreviated GB. A gigabyte is approximately one billion bytes.

B2B: On the Internet, business-to-business; also known as e-biz is the exchange of products, services, or information between businesses.

B2C: On the Internet, business-to-consumer is known as the retailing part of e-commerce.

C

Cable modem: Broadband data communication device that permits one or two-way high-speed data transfer using cable television distribution systems. Cable modems are devices that attach to cable TV network connections, with bandwidth speeds that range from 1.5Mbps to 45Mbps.

Carrier hotel: A carrier hotel is a building that houses Internet, broadband and telecommunications equipment. Carriers who buy and resell each others' services co-locate their equipment in order to interconnect with one another and thereby avoid the cost of a high-bandwidth connection provided by a local exchange carrier (LEC).

Central Office: In telephone communication in the United States, a central office (CO) is an office in a locality to which subscriber home and business lines are connected on what is called a local loop. The central office has switching equipment that can switch calls locally or to long-distance carrier phone offices.

Circuit-switched: Circuit-switched is a type of network in which a physical path is obtained for and dedicated to a single connection between two end-points in the network for the duration of the connection. Ordinary voice phone service is circuit-switched. The telephone company reserves a specific physical path to the number you are calling for the duration of your call. During that time, no one else can use the physical lines involved.

CLEC: In the United States, a CLEC (competitive local exchange carrier) is a company that competes with the already established local telephone business by providing its own network and switching. The term distinguishes new or potential competitors from established local exchange carriers (LECs) and arises from the Telecommunications Act of 1996, which was intended to promote competition among both long-distance and local phone service providers.

Coaxial Cable: A type of cable used to carry video, data and voice signals used primarily by broadband technologies. Cables are made of pure copper or copper coated wires and surrounded by insulation and encased in copper.

Co-location: (also spelled collocation or colocation) The provision of space for a customer's telecommunications equipment on the service provider's premises. See also Carrier Hotel.

D

Digital: Digital describes electronic technology that generates, stores, and processes data in terms of two states: positive and non-positive. Positive is expressed or represented by the number 1 and non-positive by the number 0. Thus, data transmitted or stored with digital technology is expressed as a string of 0's and 1's. Each of these state digits is referred to as a bit. Digital technology is primarily used with new physical communications media, such as satellite and fiber optic transmission. A modem is used to convert the digital information in your computer to analog signals for your phone line and to convert analog phone signals to digital information for your computer.

Dish: A dish or satellite dish is the installation, also called earth station, for receiving and/or transmitting electronic signals between the earth and communications satellites.

Downstream: The flow of signals from the cable system through the distribution network to the subscriber.

DSL (Digital Subscriber Line): A technology that allows multiple forms of data, voice and video to be carried over existing copper wire via enhanced technologies on the local loop. DSL is located between a network service provider's central office and the customer site. Data rates vary due to distance from the central office, with connections providing speed from 144 Kbps to 6 Mbps. xDSL refers to all the variations of DSL. The following are the different types of DSL:

- **aDSL:** Asymmetric Digital Subscriber Line or Asymmetric Digital Subscriber Loop is a DSL technology in which the transmission of data from server to client is much faster than the transmission from client to server. With aDSL, the rate from client to server is 640 kilobytes per second and from server to client can be up to 6 megabits per second. This kind of connection is useful with applications such as interactive TV

and Video on Demand, because the data the server sends is more quantitative than the data sent by the client. aDSL uses bandwidth that is not used by voice; therefore voice and data can be transmitted at the same time.

- **cDSL:** (Consumer DSL) is a trademarked version of DSL that is somewhat slower than aDSL (1 Mbps downstream) but has the advantage that a "splitter" does not need to be installed at the user's end.
- **G.Lite or DSL Lite:** (also known as DSL Lite, splitterless aDSL, and Universal aDSL) is essentially a slower aDSL that doesn't require splitting of the line at the user end but manages to split it for the user remotely at the telephone company. G.Lite provides a data rate from 1.544 Mbps to 6 Mpbs downstream and from 128 Kbps to 384 Kbps upstream. G.Lite is expected to become the most widely installed form of DSL.
- **hDSL:** The earliest variation of DSL is hDSL, which refers to high bit-rate DSL. hDSL's transmission is 784 kilobytes per second in both directions, which is used for wideband digital transmission. The main characteristic of hDSL is that it is symmetrical; an equal amount of bandwidth is available in both directions. The maximum data rate is lower than for aDSL. hDSL can carry as much on a single wire of twisted-pair copper as can be carried on a T-1 line in North America or an E1 line in Europe (2,320 Kbps).
- **iDSL:** (ISDN DSL) is somewhat of a misnomer since iDSL speed is close to ISDN data rates and service at 128 Kbps, rather than to the much higher rates of aDSL.
- **raDSL:** (Rate-Adaptive DSL) is an aDSL technology in which software determines the rate at which signals are transmitted on a given customer phone line and the delivery rate is adjusted accordingly. raDSL sends data from 640 Kbps to 2.2 Mbps downstream and from 272 Kbps to 1.088 Mbps upstream over an existing line.
- **sDSL**: Symmetric Digital Subscriber Line - A technology that can send data at up to 3 Mbps over ordinary copper telephone lines. sDSL sends digital pulses in the high-frequency bandwidth not used by normal voice communications, which makes it possible to have voice and data transmissions over the same wires. sDSL is called symmetric because, unlike aDSL (asymmetric digital subscriber line), it has the same data rates for transmission from server to client and from client to server. sDSL is intended for business use, whereas aDSL (asynchronous digital subscriber line), in which data downloads much faster than it uploads, is mainly for home use.
- **vDSL:** (very high data rate DSL) is a developing technology that could offer higher data rates over relatively short distances. vDSL may offer transmission speeds of 51-55 Mbps over lines 1,000 feet (300 meters) in length. vDSL may be deployed after aDSL and co-exist with aDSL. The transmission technology and its effectiveness in some environments is not yet determined.

E

Earth station: A satellite dish used to send or receive satellite data.

F

Fiber Optics: Fiber optic (or "optical fiber") refers to the medium and the technology associated with the transmission of information as light waves along a glass or plastic wire or fiber. Fiber optic wire carries much more information than conventional copper wire and is far less subject to electromagnetic interference. Most telephone company long-distance lines

are now fiber optic. The glass fiber requires more protection within an outer cable than copper. The installation of fiber wiring is labor-intensive.

I

ILEC: An ILEC (incumbent local exchange carrier) is a telephone company in the U.S. that was providing local service when the Telecommunications Act of 1996 was enacted. ILECs include the former Bell operating companies (BOCs) which were grouped into holding companies known collectively as the regional Bell operating companies (RBOCs) when the Bell System was broken up by a 1983 consent decree. ILECs are in contradistinction to CLECs (competitive local exchange carriers)

IP (Internet Protocol): The form of delivery of data over the Internet. The data is transmitted in packets.

ISDN: Integrated Services Digital Networks are digital telecommunications lines that can transmit both voice and digital network services over existing copper wires. ISDN is transmitted at speeds up to 128 Kbps and are offered by the RBOCs. ISDN is faster and more reliable than high-speed analog modems. Many telephone companies offer ISDN lines.

ISP: An Internet Service Provider (ISP) is a company that provides access to the Internet and other related services such as Web site building and hosting. An ISP has the equipment and the telecommunication line access required to have points-of-presence on the Internet for the geographic area served. The larger ISPs have their own high-speed leased lines so that they are less dependent on the telecommunication providers and can provide better service to their customers. Among the largest national and regional ISPs are AT&T WorldNet, IBM Global Network, MCI, Netcom, UUNet, and PSINet. ISPs also include regional providers such as New England's NEARNet and the San Francisco Bay area BARNet. They also include thousands of local providers.

L

LAN: Local Area Network (LAN) is a network of interconnected workstations sharing the resources of a single processor or server within a relatively small geographic area. Typically, this might be within the area of a small office building.

Last mile: Last-mile technology is any telecommunications technology, such as wireless radio, that carries signals from the broad telecommunication infrastructure along the relatively short distance (hence, the "last mile") to and from the home or business. To put it another way: last mile is the infrastructure at the neighborhood level. In many communities, last-mile technology represents a major remaining challenge to high-bandwidth applications

LEC: A LEC (local exchange carrier) is the term for a public telephone company in the U.S. that provides local service. Some of the largest LECs are the Bell operating companies (BOCs) which were grouped into holding companies known collectively as the regional Bell operating companies (RBOCs) when the Bell System was broken up by a 1983 consent decree. In addition to the Bell companies, there are a number of independent LECs, such as GTE.

Local loop: A local loop is the wired connection from a telephone company's central office in a locality to its customers' telephones at homes and businesses. This connection is usually on a pair of copper wires called twisted pair.

M

Microwave: Microwave signals propagate in straight lines and are not refracted or reflected by ionized regions in the upper atmosphere. Microwave beams do not readily diffract around barriers such as hills, mountains, and large human-made structures. Some reduction in strength occurs when microwave energy passes through trees and frame houses. Radio-frequency energy at longer wavelengths is affected to a lesser degree by such obstacles. The microwave band is well suited for wireless transmission of signals having large bandwidth.

N

New Media: A term for all forms of electronic communication. New media usually includes any and all of these:

- Special audiovisual effects of any kind
- Larger than 17 inch displays
- Streaming video and streaming audio
- 3-D and virtual reality environments and effects
- Highly interactive user interfaces
- Mobile presentation and computing capabilities
- Any kind of communication requiring high-bandwidth
- CD and DVD media
- Telephone and digital data integration
- Online communities
- Microdevices with embedded programming
- Live Internet broadcasting as on the MBone
- Person-to-person visual communication (as in CU-See-Me)
- One-to-many visual communication as with Webcams
- Applications of any of these types of technology in particular fields such as medicine (telemedicine) and other fields.

P

Packet: A packet is the unit of data that is routed between an origin and a destination on the Internet or any other packet-switched network.

Packet-switched: Packet-switched describes the type of network in which relatively small units of data called packets are routed through a network based on the destination address contained within each packet. Breaking communication down into packets allows the same data path to be shared among many users in the network. This type of communication between sender and receiver is known as connectionless (rather than dedicated). Most traffic over the Internet uses packet switching and the Internet is basically a connectionless network.

PDA: Personal Digital Assistant or PDA is a term for any small mobile hand-held device that provides computing and information storage and retrieval capabilities. A PDA is also referred to as a handheld computer. The PDA device may be used for personal or business use, with calendars, address books and in some instances Internet connectivity. Other services PDA devices provide include the capability of scanning bar codes on products, connectivity with telephone and paging systems, wireless fax services and compatibility with PC's.

S

Set-top box: A set-top box is a device that enables a television set to become a user interface to the Internet and also enables a television set to receive and decode digital television (DTV) broadcasts. DTV set-top boxes are sometimes called receivers. A set-top box is necessary to television viewers who wish to use their current analog television sets to receive digital broadcasts.

T

Telecommunications Act of 1996: The Telecommunications Act of 1996, enacted by the U.S. Congress on February 1, 1996 and signed into law by President Bill Clinton on February 8, 1996, provides major changes in the laws affecting cable TV, telecommunications, and the Internet. The law's main purpose is to stimulate competition in telecommunication services. The law specifies:

- How local telephone carriers can compete,
- How and under what circumstances local exchange carriers (LECs) can provide long-distance services,
- The deregulation of cable TV rates.

Twisted pair: Twisted pair is the ordinary copper wire that connects home and many business computers to the telephone company. To reduce crosstalk or electromagnetic induction between pairs of wires, two insulated copper wires are twisted around each other.

T1 Line: A telephone line connection for digital transmission that can handle 24 voice or data channels at 64 kilobits per second, over two twisted pair wires. T1 lines are used for heavy telephone traffic, or for computer networks linked directly to the Internet. T1 lines are normally used by small and medium-sized companies with heavy network traffic. They can send and receive very large text files, graphics, sounds, and databases very quickly.

T3 Line: A connection made up of 28 T1 carriers, used to transmit digital signals on fiber-optic cable over 44 megabits per second. T3 can handle 672 voice conversations or one video channel. The T3 line has enough bandwidth to transmit full-motion real-time video, and very large databases over a busy network. A T3 line would be installed as a major networking channel for a large corporation or university with high volume network traffic. The backbones of the major Internet service providers are comprised of T3 lines.

U

Upstream: Refers to the flow of data from the subscriber to the cable system.

V

VPN (Virtual Private Network): A private data network that makes use of the public telecommunication infrastructure, maintaining privacy through the use of security procedures. The idea of the VPN is to give the company the same capabilities at much lower cost by using the shared public infrastructure rather than a private one.

W

WAN: Wide Area Network (WAN) is a network in which computers are connected to each other over a long distance, using telephone lines and satellite communications.

Wired Real Estate: A term created by Deutsche Banc Alex. Brown to describe the convergence of real estate and technology. Broadband solution providers are working with real estate owners to wire buildings for high speed access. Wired Real Estate also includes e-Business initiatives, both B2B and B2C.

Many real estate transaction structures are being revolutionized by the Internet, and e-services are just beginning to be launched by real estate companies.

Wireless: In computer networking, this term refers to networks that are connected by radio rather than by wires. Wireless communications are enabled by packet radio, spread spectrum, cellular technology, satellites, and microwave towers, and can be used for voice, data, video, and images. Sometimes wireless networks can interconnect with regular computer networks. Wireless speed begins at 250 Kbps but quality may vary depending on weather conditions.

Sources: Computer Currents High-Tech Dictionary, *Deutsche Banc Alex. Brown,* Glossary of Academic Information Technology Terms and *Whatis.com*

Appendix II

"New Economy" Company Profiles—These companies may be generally characterized as on the razor's edge of the future economy.

Public Companies

Private Companies

Sources: Company financials and Deutsch Banc Alex. Brown Estimates

Advanced Radio Telecom (ARTT)

www.artelcom.com
500 108the Avenue, Suite 2600, Bellevue, WA, 98004
Management Robert McCambridge, Interim CEO

Description Advanced Radio Telecom, ART, is a broadband Internet Protocol Service Provider (IPSP), enabling carriers to extend high-speed backbone performance and data center applications to their customers. ART owns and operates broadband wireless metropolitan area networks in San Jose, Seattle, Portland and Phoenix. ART offers an integrated package of data solutions including Internet access, Web hosting, Web design services, remote access service, Internet portal, Internet value-added services, and gateway services and intends to offer electronic commerce applications, multimedia services, voice and fax over IP and other value-added data services. ART will build high-speed, 100 Mbps IP metropolitan area networks in 10 markets in 2000 including Boston, Dallas, Houston, Los Angeles, New York, Orange County, California, Phoenix, San Diego, Seattle, and Washington D.C. ART plans to roll out a total of 40 markets over the next few years. Advanced Radio Telecom's 100 Mbps IP metro networks provide service to Internet Service Providers (ISP), Interexchange Carriers (IXC), On-site Service Providers (OSP) and Application Service Providers (ASP). ART is a provider of broadband Internet services to businesses not served by fiber-optic networks. According to ART, fiber is faster, but it only serves 3% of the commercial office buildings; and it costs hundreds of thousands of dollars per mile to run fiber optic cable.

Strategy ART owns licenses in the 38 GHz band in 90 of the top 100 markets covering over 50% of the nations business access lines and approximately 186 million POPs (Point-Of-Presence). ART's Metro Networks feature the following: 1) 100 Mbps Fast Ethernet full-duplex ring architecture, 2) Multi-megabit bandwidth from 3 Mbps to native LAN speeds, 3) Protocol Specific (IP), application generic network, 4) Fiber-like reliability, 5) 38 GHz licensed radio spectrum, and 6) 24 x 7 monitoring by ART's network management center. ART's system is a combination of fixed wireless antennae placed on the building roof, and fiber optic facilities, together with unobtrusive wall mounted indoor components. ART has formed relationships with a wide range of partners, including Qwest, Cisco Systems, Oak Investment Partners, WFI, Triniton and Internap, whose products and services complement the ART solution.

Recent Events *February 15, 2000*: ART signed a master license agreement with The RREEF Funds for access to more than 800 commercial buildings nationwide.

December 2, 1999: ART and U.S. RealTel Inc., one of the world's largest landlords of pre-leased telecommunications access sites, formed a master sublease agreement that allows ART access to up to 1,000 commercial buildings.

September, 1999: Pursuant to terms of a stock purchase agreement entered into with a group of investors, ART sold 2,234,607 shares of Series A convertible preferred stock and 902,893 shares of Series B non-voting convertible preferred stock, each at $80 per share, to the investors in exchange for an aggregate of $251 million.

DBAB Analysts' Comments "We continue to believe ART's value proposition of offering 10 Mbps speeds at T1 (1.5 Mbps) rates will enable the company to successfully penetrate the small/medium business market long term...The first three anchors are Washington D.C. (to address the northeast), Los Angeles (to address California) and Houston (to address Texas) – from which ART expects to reach a total of 10 markets by the end of 2000 on its way to 50 nationwide...The new ART network is a consecutive point-to-point, or ring, architecture that provides users with a 10 Mbps link to a 100 Mbps Fast Ethernet ring." *(Bo Fifer, "Upbeat Conference Call Highlights 2000 Expectations," First Call note dated November 10, 1999.)*

"Because we believe wireless can drive broadband access to the largest segment of the business market at speeds of up to 155 Mbps today (55% faster than Fast Ethernet), we believe the network computing model may in fact be dependent on wireless in buildings unserved by fiber or other high speed media (into which category the overwhelming majority of buildings fall)...In the estimated 10,000-15,000 commercial office buildings with fiber access, speed is not an issue. In the remaining 700,000-plus commercial office, there is no alternative to the incumbent (low bandwidth) copper network...With a LAN-quality last mile solution, software providers such as Microsoft can begin developing next-generation applications that take advantage of new bandwidth capabilities." *(Bo Fifer, "Wireless as Part of the Future Computing Paradigm," First Call note dated November 9, 1999.)*

Financial Details

DBAB Rating	**Strong Buy**
Analyst - Bo Fifer	
212 469 7420	
Price (5/12/2000)	$14.06
52 wk Hi-Lo	$49-$7
Shares Outstanding	28.84M
Float	23.52M

	1999A	2000E	2001E
EPS	**($2.81)**	**($2.97)**	**($4.91)**
Revenues	**$1.3m**	**$2.1m**	**$8.3m**

Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$108,161
ST Investments	$75,887
Pledged Securities	$9,407
Accounts Receivable	$234
Prepaid Expenses	$227
Property & Equipment, net	$14,747
FCC Licenses, net	$180,754
Deferred Financing costs, net	$8,345
Other Assets	$374
Total Assets	$398,136
Liabilities & Equity	
Accounts Payable	$5,780
Accrued Compensation and benefits	$3,022
Accrued taxes other than income	$5,034
Other Accrued Liabilities	$2,826
Accrued Interest Payable	$7,120
Current Portion LT Debt	$380
LT Debt	$109,047
Convertible Preferred Securities	$243,536
Shareholders' Equity	($7,935)
Total Liabilities & Shareholders Equity	$398,136
Income Statement* (000s)	
Revenues	$1,341
Operating Expenses:	
Technical & Network Operations	($17,703)
Sales & Marketing Expense	($6,154)
General & Administration	($17,853)
Provision for Equipment Impairment	($20,043)
Depreciation & Amortization	$14,408
Total Operating Expenses	($76,161)
Operating Income (Loss)	($74,820)

* As of December 31, 1999.

Allied Riser Communications (ARCC)

www.alliedriser.com

1700 Pacific Avenue, Suite 400 Dallas, TX, 75201-4679

Management Stephen Schovee, Chairman; David Crawford, CEO; Todd Doshier, CFO

Description Allied Riser Communications, ARC, is a facilities-based provider, a BLEC (Building Local Exchange Carrier) of broadband data, video and voice communications services to small and medium-sized businesses in 22 major metropolitan areas in the United States. ARC has built its network not from the "last mile" but from the "first mile." The Company owns and operates in-building fiber optic networks inside 61 office buildings with 33.6 million square feet of rentable space. ARC designs, installs, owns and manages these in-building vertical communication infrastructures that normally run inside secure vertical utility shafts from the building's basement to the top floor. These riser networks are, in turn, interconnected to high-capacity fiber optic backbone networks which link commercial properties to the Internet. Fiber optic cabling enables the highest capacity, highest performance networks. Allied Riser has signed agreements with more than one dozen leading real estate companies to obtain access to install and operate fiber optic networks in buildings containing more than 325 million rentable square feet of office space.

Strategy Allied Riser provides the "first mile" of fiber optic Internet connectivity from the desktop to the information superhighway. In addition, ARC provides a comprehensive suite of other services, including ARC Conference, the most feature-rich teleconferencing service available today, ARC-OpticTV, business television delivered to the desktop, as well as e-mail services and web hosting. ARC OpticNet fiber optic powered Internet service is the fastest commercially available business Internet solution for small to medium-size businesses. ARC OpticNet is up to 350 times faster than standard 28.8 Kbps dial-up modems, up to 70 times faster than ISDN or ADSL connections, and over 6 times faster than T1 connections.

Allied Riser partners with real estate owners and generally targets buildings with more than 100,000 square feet and 10 or more tenants. ARC has secured access to more than 1,250 office buildings representing approximately 420 million square feet. While securing access to additional buildings, Allied Riser entered into warrant acquisition. The following table details buildings with more than 100,000 square feet in the 10 largest U.S. real estate markets covered by Torto Wheaton. The table gives total data for the markets and Allied Riser's share of buildings either in operation or under contract in these markets.

Market	Target Buildings in Operation Or Under Contract	Square Feet	Total in Market	Square Feet
New York City	76	60,233,000	749	352,000,000
Washington, D.C.	177	38,980,000	821	168,000,000
Chicago	96	45,351,000	501	156,000,000
Los Angeles	76	18,228,000	477	122,000,000
Dallas	45	17,690,000	397	108,000,000
Houston	71	29,842,000	359	100,000,000
Boston	106	28,107,000	400	92,000,000
Atlanta	66	20,188,000	322	80,000,000
Northern New Jersey	36	8,128,000	361	76,000,000
San Francisco	74	23,381,000	204	53,000,000

Source: *Torto Wheaton and Company Financials*

Financial Details

Price (5/12/2000)	$15.50
52 wk Hi-Lo	$49-$11
Shares Outstanding	56.85M
Float	56.85M
Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$152,564
ST Investments	$162,013
Accounts Receivable	$259
Prepaid Expenses	$5,454
Other Assets	$1,088
Property & Equipment, net	$46,577
Real Estate Access Rights, net	$107,099
Other Assets	$1,088
Total Assets	$475,054
Liabilities & Equity	
Accounts Payable	$2,817
Accrued Liabilities	$12,095
Current Portion of Capital Lease	$17,961
Capital Lease	$4,679
Warrants	$109,135
Shareholders' Equity	$452,414
Total Liabilities & Shareholders Equity	$475,054
Income Statement* (000s)	
Revenues	$1,870
Operating Expenses:	
Network Operations	($7,682)
Selling Expense	($9,296)
General & Administration	($25,981)
Total Operating Expenses	($62,647)
Operating Income (Loss)	($60,777)

* As of December 31, 1999.

Recent Events *March 6, 2000*: ARC formed an agreement with Enron Broadband Services, a wholly owned subsidiary of Enron Corp., to stream rich media content via the Internet to ARC customers at ultra-high speeds. The agreement provides ARC with direct access to Enron's fiber optic overlay to the Internet, the Enron Intelligent Network (EIN).

March 1, 2000: ARC signed an agreement with Clarion Partners, a leading real estate investment management companies, to install its broadband fiber optic communications network in up to 80 investment-grade buildings with nearly 20 million square feet of high-quality commercial office space.

February 3, 2000: ARC signed agreements with eight of the nation's leading real estate owners and managers to install its broadband fiber optic network in buildings with more than 33 million square feet of prime commercial office space. The buildings are owned, managed and/or advised by the following: Angelo, Gordon & Co.; LP, Rubenstein and Co., LP; Berwind Property Group; Leggat McCall Properties LLC; Pope and Land Enterprises, Inc.; American Enterprises, Inc.; Minshall Stewart Shelby and Co.; and Urdang & Associates Real Estate Advisors, Inc.

January 4, 2000: ARC's construction is now underway with more than a dozen major real estate owners and managers: Boston Properties, Cornerstone Properties, Equity Office Properties Trust, Fisher Brothers, Hamilton Partners, Hines, MetLife, Shorenstein Company, Transwestern, TrizecHahn Office Properties, Vornado Realty Trust and the Whitehall Funds. *December 28, 1999*: ARC signed an agreement with CIGNA Investment Management, the asset management division of CIGNA Corp., to install broadband communication infrastructure in office buildings with more than 7 million square feet of rentable space.

Amazon.com, Inc. (AMZN)

www.amazon.com
1200 12th Avenue South, Suite 1200, Seattle, WA, 98144
Management Jeffery Bezos, Chairman/CEO; Warren Jenson, CFO

Description Amazon.com, Inc. is an Internet book, music and video retailer that offers more than 4.7 million book, music CD, DVD, computer game and other titles. Amazon.com is the Internet's number one music, video and book retailer with 17 million customers. The company offers more than 18 million unique items. Categories include books, music, video, toys, electronics, home improvement products and software. Amazon has built its brandname around selection, personalized services, convenience, price, accessibility, customer service, quality of search tools, quality of editorial and other site content, and reliability and speed of fulfillment. Amazon.com was incorporated in 1994 and the initial public offering was in May 1997.

Strategy Amazon.com is a proven technology leader. The company developed electronic commerce innovations such as 1-Click Ordering, All Products Search, Amazon.com Payments, Amazon.com Anywhere, personalized shopping services and easy-to-use search and browse features. Amazon offers a free e-greeting card service and also provides a community of online shoppers an easy and safe way to purchase and sell a large selection of products through Amazon.com Auctions and zShops.

Recent Events *In 4Q99*, the company had a $39 million inventory writedown related to toys and consumer electronics. *In 3Q99*, Amazon opened new distribution centers in Nevada, Georgia, Kentucky, Kansas and North Dakota. Additional new distribution centers will be located in Kentucky, Germany and the United Kingdom.

Online stores launched:

- November, 1999: A Home Improvement store site was launched
- November, 1999: A Software store site was launched
- November, 1999: A Video Games store site was launched
- November, 1999: Sothebys.Amazon.com site was launched
- October, 1999: zShops site was launched
- July, 1999: A Toys store site was launched
- July, 1999: An Electronics store site was launched
- March, 1999: An Auction site was launched
- November, 1998: A DVD/Video store site was launched
- June 1998: A Music store site was launched
- July 1995: A Book store site was launched

Adver-Commerce Deals:

- Living.com: $145 million for 5 years, equating to $29 million/year.
- Audible: $30 million for 3 years, equating to $10 million/year.
- Drugstore.com: $105 million for 3 years, equating to $35 million/year.
- Greenlight.com: $82.5 million for 5 years, equating to $16.5 million/year.
- Ashford.com: $95 million for 1 year.

DBAB Analysts' Comments "Amazon has complemented its core competencies (convenience, selection, and consumer value) on the "front-end" with an impressive world-class product fulfillment platform, representing a major strategic differentiator for the company. We believe that the company is intent on building a broad distribution and logistics footprint with the buildout of multiple distribution facilities in the U.S. and perhaps even globally." *(Statement from Jeetil Patel.)*

"The biggest risk is that the company doesn't stick to its guns regarding break-even timing (4Q 2001), and also see new category expansion and adver-commerce increasing execution risk exponentially...Revenue per customer (customers that have transacted in the past 12 months, as defined by Amazon.com) in 4Q99 was $116 and Gross Profit per customer was $15.08...We feel that, over time, several of the risks and perils found in traditional retailing (i.e. merchandising, inventory management, etc.) will begin to plague companies in the virtual world...Amazon.com's number of estimated new customers in 2000 is 14.3M and the number of total customers in 2000 is estimated to grow to 31.2M." *(Jeetil Patel, "4Q Revenues Ahead of Expectations Yet Higher Than Expected Losses," First Call note dated February 3, 2000.)*

Financial Details

DBAB Rating	**Market Perform**
Analyst Jeetil Patel	
415-617-4223	
Price (5/12/2000)	$53.75
52 wk Hi-Lo	$113-$41
Shares Outstanding	349.52M
Float	288.42M

	1999A	2000E	2001E
EPS	**($1.19)**	**($1.35)**	**($0.75)**
Revenues	**$1,639**	**$2,788**	**$4,380**

Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$116,962
Marketable Securities	$589,226
Inventories	$220,646
Prepaid Expenses	$85,344
Fixed Assets, net	$317,613
Intangibles, net	$730,144
Investments in equity-method	$226,727
Other Investments	$144,735
Deferred Charges	$40,154
Total Assets	$2,471,551
Liabilities & Equity	
Accounts Payable	$463,026
Accrued Expenses	$126,017
Accrued Advertising	$55,892
Deferred Revenue	$54,790
Interest Payable	$24,888
Current Portion LT Debt	$14,322
LT and Other Debt	$1,466,338
Shareholders' Equity	$266,278
Total Liabilities & Shareholders Equity	$2,471,551
Income Statement* (000s)	
Revenues	$1,639,839
Cost of Sales	($1,349,194)
Gross Profit	$290,645
Operating Expenses:	
Marketing & Sales	(($413,150)
Technology & Content	($159,722)
General & Administration	($70,144)
Stock based Compensation	($30,618)
Amortization of Intangibles	($214, 694)
Merger/Acquisition Costs	($8,072)
Total Operating Expenses	($896,400)
Operating Income (Loss)	($605,755)
1999 Revenue Breakdown for US (M)	
Books	$321
Music	$78
DVD/Video	$64
Children's Products	$95
Other	$51
Total U.S.	$605
International	$71
Total Revenues	$676

* As of December 31, 1999.

AT&T Wireless Group (AWE)

www.attws.com
P.O. Box 97061, Redmond, WA, 98073-9761
Management John Zeglis, Chairman/CEO

Description AT&T Wireless Services, Inc., a subsidiary of AT&T Corporation, operates one of the largest digital wireless networks in North America serving customers with wireless voice and data communications. AT&T Wireless trades as a tracking stock to AT&T, effective April 27, 2000. AT&T Wireless will pursue four areas of business focused on growth within the wireless industry: voice and data mobility, fixed wireless, international wireless and e-business investments.

Strategy AT&T Wireless provides wireless service to more than 10.1 million customers, which includes 6.8 million Digital PCS customers and is licensed to cover 94% of the U.S. population. Digital PCS is based on TDMA (Time Division Multiple Access) technology, the most widely used digital technology in the United States. With the North American Cellular Network in 1990, AT&T Wireless was the first to offer nationwide service to the U.S. and Canada. In 1993, AT&T Wireless was first to offer digital wireless technology and in 1994 the company introduced new technology for mobile data, with wireless packet-based connectivity for laptop computers. The company's network is connected to more than 7,000 cities throughout North America and in many countries around the world through the Global Wireless Network. Through its own extensive network, joint venture partners and roaming partners, AT&T Wireless offers its customers nearly seamless coverage anywhere in the United States. In addition, through a strategic alliance with Rogers Cantel Mobile Inc., wireless customers throughout Canada can enjoy wireless services under the Cantel AT&T name. Currently, AT&T Wireless offers commercial wireless data service in more than 100 major metropolitan markets serving more than 50 percent of the U.S. population.

AT&T Wireless includes all of AT&T's mobile and fixed wireless technology and related spectrum rights covering more than 90 percent of the nation, including all of AT&T's 850 MHz, 1900 MHz and 38 GHz licenses. In addition to these licenses, the group will manage all elements of AT&T's existing wireless businesses, including all wireless networks, operations and facilities, and interests in partnerships and affiliates providing wireless services in the United States and abroad. The company offers more choices for voice and data services, from mobility services using phones, laptops or PDA's to ground-breaking fixed wireless solutions for the home or small business.

Key products include: analog & digital voice, digital PCS, long distance bundled wireless, long distance service, digital flat rate pricing, wireless office service, web-enabled phone service, wireless IP data, prepaid services, family plan, group calling and fixed wireless broadband residential telephone service and high speed data access.

	1998	1999	2000E	2001E
Total Subscribers	69.2	86.7	110	134
% Change	24%	25%	27%	22%
Net	13.4	17.5	23.3	24
POPs	271	273	276	279
Penetration	25.6%	31.7%	39.8%	48.1%
Penetration Gain	4.8%	6.2%	8.1%	8.2%

Source: *Deutsche Bank Wireless Analysts' Estimates and Company Financials*

Financial Details

DBAB Rating	**Buy**
Analyst Jeff Hines	
212 469 7250	
Price (5/12/2000)	$28.25
52 wk Hi-Lo	$36-$28
Shares Outstanding	2,310M
Float	na

	1999A	2000E	2001E
EPS	($0.24)	($0.06)	($0.14)
Revenues	$6,715	$8,517	$10,527

Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$7,717,000
Receivables, net	$9,738,000
Other Current Assets	$2,244,000
Property, Plant &	$38,456,000
Franchises, net	$54,635,000
Goodwill, net	$28,265,000
Investments	$38,162
Other Assets	$9,064,000
Assets held for sale	$9,498,000
Total Assets	$202,179,000
Liabilities & Equity	
Current Debt	$48,952,000
LT Debt	$30,470,000
Other LT Liabilities	$7,973,000
Shareholders' Equity	$62,968,000
Total Liabilities & Income Statement*	$202,179,000
Revenues	$58,627,000
Operating Expenses:	
Access and other	($14,686,000)
Network and other service	($12,299,000)
Selling, General &	($12,019,000)
Depreciation &	($8,429,000)
Asset Impairment	($975,000)
Total Operating Expenses	($48,408,000)
Operating Income (Loss)	$10,219,000

* As of December 31, 1999.

Recent Events *On April 27, 2000,* AT&T announced that AT&T Wireless Group tracking shares began trading on the New York Stock Exchange at $30.12.

On April 26, 2000, AT&T announced that its initial public offering of AT&T Wireless Group tracking stock was priced at $29.50 per share. The stock will be listed on the New York Stock Exchange under the ticker symbol AWE. *On March 14,* 2000 AT&T *announced that its shareowners voted by a strong margin to approve the company's proposal to create a tracking stock that will* reflect the economic performance of AT&T's wireless services businesses.

DBAB Analysts' Comments "AT&T Wireless is building out wireless networks covering approximately 190 million people across the U.S. We believe that there are several key points for investors to note : 1) One of the largest wireless companies in the U.S. 2) Huge upside (in our opinion) from fixed wireless business and potential international expansion 3) Significant opportunity to enhance domestic financials and competitive position through potential US expansion and acquisition 4) Early to market wireless data opportunity." *(Bo Fifer, "We are Initiating Research Coverage of AT&T Wireless with a BUY Investment Rating on the Shares and $40 DCF-Derived Price Objective," First Call note dated May 8, 2000.)*

CMGI, Inc. (CMGI)

www.cmgi.com

100 Brickstone Square, Andover, MA, 01810

Management David Wetherall, Chairman/CEO; Andrew Hajducky III, CFO

Description CMGI, Inc. develops and operates Internet and direct marketing companies as well as venture funds focused on the Internet. CMGI was founded in 1968 as College Marketing Group. Its activities were initially B2B based. In 1986, David Wetherell undertook a leveraged buyout, setting into motion the transformation of the company into CMGI. The IPO was held in January 1994, at $8/share. In 1998, the company was renamed CMGI—"Creating Net Value." CMGI and its subsidiaries develop and operate Internet and fulfillment services companies. CMGI includes majority owned subsidiaries—ADSmart Corporation, Engage Technologies, Inc., Accipiter, Inc., InforMation Publishing Corporation, NaviSite Internet Services Corporation, Planet Direct Corporation and Password Internet Publishing Corporation—as well as minority investments in Magnitude Network, LLC and Open Market, Inc. CMGI's first Internet venture fund is CMG@Ventures I, LLC, which has equity investments in Blaxxun Interactive, Inc., Lycos, Inc., Parable LLC and Vicinity Corporation. The company's second Internet venture fund is CMG@Ventures II, LLC, which holds equity investments in companies such as Chemdex Corporation, Critical Path, KOZ, Inc., Parable, Reel.com, Inc., Sage Entertainment, Inc., Silknet Software, Inc., Softway Systems, Inc., Speech Machines plc, Universal Learning Technology and Visto Corporation.

Strategy CMGI is at the forefront of the Internet revolution; continually capitalizing on new opportunities. It is a company that owns and invests in nearly sixty B2B and B2C companies that fall in one fo four core areas of the Internet economy. Descriptions of the four core areas of CMGI's strategy follow:

- **CMGI Marketing/Advertising Companies** cover the breadth of the marketing and advertising process, from the initial stages of building a Web site through to post-purchase customer service. B2B companies include 1stUp.com, AdForce, Adsmart, Engage, Flycast Communications, Vicinity. Acquisition Pending: yesmail.com.
- **CMGI Content & Community Sites** are some of the most successful stories on the Web—Lycos and Geocities—and the company continues to be active in shaping the content and community business models as they mature and grow. B2B companies include: KnowledgeFirst, KOZ.com, Oncology.com, ThingWorld.com. These B2C companies include: AltaVista, Asimba.com, blaxxun interactive, Domania, eCircles.com, eGroups.com, Gamers.com, HotLinks, iCast, Lycos, MyFamily.com, Spotlife. These B2B and B2C companies include: FindLaw, MyWay.com, WebCT.
- **CMGI e-Commerce Companies** are dominant in both the B2C and B2B arenas. These B2B companies include: BizBuyer.com, foodbuy.com, GoFish.com, KnowledgeFirst, NestOffice.com, Ventro, Vstore. B2C companies include: AltaVista, AuctionWatch.com, Boatscape.com, buyersedge.com, CraftShop.com, Furniture.com, Half.com, Mondera.com, MotherNature.com, NextPlanetOver.com, PlanetOutdoors.com, Productopia, Snapfish. B2B and B2C companies include: CarParts.com, EXP.com, NextMonet.com, SalesLink, WebCT. Acquisition Pending: uBid.com.
- **CMGI Enabling Technology Companies** are the glue that hold the Internet together—they provide the strategies, designs and technologies to help companies—dot.coms as well as traditional corporations—exploit the full potential of the Internet. B2B companies include: 1ClickCharge, 1stUp.com, Activate.net, CMGI Solutions, Critical Path, Engage, Equilibrium, Intelligent/Digital, NaviSite, OneCore.com, Radiate, SalesLink, Silknet Software, Speech Machines, Vicinity, Virtual Ink, Vstore. These B2C companies include: Spotlife, Visto. B2B and B2C companies include: NaviNet, SalesLink, Tribal Voice.

Financial Details

Price (5/12/2000)	$55.19
52 wk Hi-Lo	$163-$33
Shares Outstanding	279.88M
Float	210.36M
Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$880,695
Marketable Securities	$2,378,703
Accounts Receivable	$158,272
Inventories	$19,802
Prepaid Exp and Other	$50,341
Property & Equip., net	$167,977
Investments in affiliates	$409,230
Intangible Assets, net	$4,002,394
Deferred Income Tax	$17,318
Other Assets	$182,083
Total Assets	$8,266,815
Liabilities & Equity	
Current Portion LT Debt	$16,267
Acct Payable and Accrued	$319,490
Accrued Income Tax	$39,974
Deferred Income Tax	$835,528
Deferred Revenues	$26,456
Other Current Liabilities	$102,217
LT Debt	$231,142
LT Deferred Revenues	$1,518
Other LT Liabilities	$41,146
Minority Interest	$416,888
Covertible Preferred Stock	$415,739
Shareholders' Equity	$5,820,450
Total Liabilities & Shareholders Equity	$8,266,815
Income Statement* (000s)	
Revenues	$277,200
Operating Expenses:	
Cost of Revenues	($229,922)
Research & Development	($56,329)
Selling	($185,238)
General & Administrative	($68,225)
Amortization	($423,870)
Total Operating Expenses	($963,584)
Operating Income (Loss)	($686,384)

* As of January 31, 1999. Income Statement for 6 months

1999 Events: Key acquisitions in 1999 include Equilibrium, AdForce, Activate.net, Flycast Communications, 1stUp.com AltaVista, Clara Vista Corp.and Activerse. Also, I/PRO was acquired as a wholly owned subsidiary. The Company increased its strategic position in Magnitude Network, formed a strategic alliance with Compaq and launched ZineZone.coms. Other news of note: NaviSite (NAVI) completed its IPO, and MotherNature.com registered for IPO. Engage acquired AdKnowledge. •CMG Direct was sold to MSGI and the sale of legacy CMG Direct was announced. Adsmart merged with 2CAN Media •@Ventures funded CarParts.com, eCircles.com, Furniture.com, HotLinks, Medical Vilage, nextMonet.com, OneCore Financial Network and ONElist.

Copper Mountain Networks, Inc. (CMTN)

www.coppermountain.com
2470 Embarcadero Way, Palo Alto, CA, 94303
Management Joseph Markee, Chairman; Richard Gilbert, CEO; John Creelamn, CFO

Description Copper Mountain develops and markets a comprehensive family of DSL solutions that enable high-speed internetworking over existing copper facilities. Copper Mountain's CopperRocket CPE family addresses the bandwidth, reliability, ease-of-use, and cost concerns of remote offices and users.

Strategy The two main partners of Copper Mountain are Lucent and 3Com.

Lucent Technologies Original Equipment Manufacturer (OEMs) provide the full product suite of Copper Mountain DSL (Digital Subscriber Line) equipment and supports it with Lucent's NetCare service organization for installation, network management, and customer support professional services to create turnkey DSL solutions for CLECs. Lucent and Copper Mountain co-market the co-branded OEM version of Copper Mountain's end-to-end solution.

3Com Corporation formed a strategic alliance with Copper Mountain in December of 1998 to develop and distribute a line of CPE compatible with Copper Mountain's DSL concentrator. The first members of this product line, the 3Com SDSL modem and 3Com IDSL modem, are based on Copper Mountain's CopperRocket 201 CPE. Compatible CPE is available from the following Copper Mountain CopperPartners: 3Com, ADC Kentrox, Efficient Networks, Larscom, Lucent, MCK Communications, Netopia, Ramp Networks, Vertical Networks, Xavi, Xpeed, and Zyxel.

DSL delivers premium services over existing in-buildings twisted pair copper wiring. DSL utilizes existing twisted pair wiring to deliver high bandwidth connections to e-tenants, there is typically no building re-wiring expense or disruptive construction. Over 118,000 multi-tenant unit buildings in the U.S. are targets for DSL deployment. According to the Dept. of Energy building surveys, there are approximately 31,000 skyscrapers, 26,000 mid-size buildings, and 61,000 small buildings in the U.S. DSL leverages existing copper phone wire infrastructure to offer high-speed transmissions for a fraction of the cost of traditional broadband services. While DSL was initially used to provide low-cost, high-speed Internet access, advances in DSL technology enable it to offer a whole line of voice and data services. In fact, a single copper pair can simultaneously support up to 24 voice connections plus data service. Copper Mountain's CopperRocket CPE family addresses the bandwidth, reliability, ease-of-use, and cost concerns of remote offices and users. Its carrier-class CopperEdge DSL concentrators and CopperView network management solutions offer a robust and scalable platform for carriers and multi-tenant unit service providers to generate a high return on investment while satisfying ever-increasing user demand for bandwidth.

Financial Details

Price (5/12/2000)	$81.63
52 wk Hi-Lo	$115-$11
Shares Outstanding	50.14M
Float	36.94M
Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$25,405
Marketable Securities	$91,764
Accounts Receivable, net	$18,992
Inventories	$12,801
Other Current Assets	$1,530
Property & Equipment, net	$8,825
Marketable Investments	$5,139
Other Assets	$1,319
Total Assets	$165,775
Liabilities & Equity	
Accounts Payable	$7,887
Accrued Liabilities	$8,800
Current Portion of Capital Lease	$1,618
Capital Lease Obligations	$4,044
Other Accrued	$105
Shareholders' Equity	$143,321
Total Liabilities & Shareholders Equity	$165,775
Income Statement* (000s)	
Revenues	$112,723
Cost of Revenues	($53,002)
Gross Profit	$59,721
Operating Expenses:	
Research & Development	($15,523)
Sales & Marketing	($16,158)
General & Administrative	($5,998)
Amortization of deferred stock compensation	($5,431)
Total Operating Expenses	($43,110)
Operating Income (Loss)	$16,611

* As of December 31, 1999

DSL brings new revenue potential into the copper wiring that connects more than 550 million homes and offices worldwide to the public telephone network. DSL should be viewed as an enabling technology for a full range of business services, including e-commerce, virtual private networking (VPN), Frame Relay, voice services and transparent LAN services. By the end of 1998, Copper Mountain DSL concentrators were installed in more than 1,000 central offices (COs) and multi-tenant units (MTUs). For 1999, CMTN sales to their three largest customers accounted for approximately 88% of revenue, of which sales to NorthPoint Communications accounted for approximately 37% of revenues, sales to Rhythms NetConnections accounted for approximately 28% of revenues and sales to Lucent Technologies accounted for approximately 23% of revenues.

A report issued in February 2000, by the Dell'Oro Group, established that Copper Mountain's revenues accounted for 42.5% of total business DSL equipment sales in 1999. Most of Copper Mountain's manufacturing and supply chain management operations are outsourced to Flextronics International. The market for telecommunication equipment is highly competitive. Copper Mountain competes directly with Nokia, Alcatel S.A., Cisco Systems, Lucent, and Paradyne.

Covad Communications Group, Inc. (COVD)

www.covad.com
2330 Central Expressway, Santa Clara, CA, 95050
Management Charles McMinn, Chairman; Robert Knowling Jr., CEO; Timothy Laehy, CFO

Description Covad Communications is a high-speed Internet and network access provider offering digital subscriber line (DSL) and services to Internet Service Provider (ISP) and enterprise customers. Some of Covad's enterprise customers include Cisco Systems, Concentric Network, Epoch Networks, Oracle, PeopleSoft, Stanford University, Verio and Whole Earth Networks.

Strategy Covad is a leading provider of broadband communications services to ISPs, enterprise and telecommunications carrier customers. Since March 1998, Covad has raised $569 million of gross proceeds from debt and equity financings to fund the deployment and expansion of their networks. Covad's network covers more than 25 million homes and businesses in major MSAs. Covad currently has over 1,000 Central Offices (COs) service ready and expects to have 2,000 COs service ready by the end of 2000.

At the beginning of 1999, Covad entered into separate strategic relationships with AT&T, NEXTLINK, Qwest Communications, and Concentric Network. In these relationships, each company made an equity investment in Covad (totaling approximately $60 million) to support the deployment of Covad's DSL network in new and existing regions and agreed to market and resell Covad's DSL lines to their customers. Covad has the largest national broadband access network. By year-end 2000, Covad predicts that their network will reach more than 40% of all US homes and 45% of all US businesses.

Recent Events *March 9, 2000*: Covad acquired LaserLink.net, which is the market leader in providing virtual ISP capabilities to companies who seek to leverage their brand and strengthen their customer relationships through the Internet. The transaction was valued at approximately $387 million. Covad can broaden its customer base by increasing the services available to the company's existing ISPs and expand the number of channel partners that sell its broadband access service. LaserLink.net's integrated customer management capabilities will enable Covad to provide a complete solution to a broader range of channel partners.

December 9, 1999: Covad launched a broadband content pilot program with INTERVU Inc., a leading service provider of Internet audio and video delivery solutions, to optimize the delivery of streaming audio and video. The two companies are working together to deliver live and on-demand TV quality video and CD quality audio content to Covad's broadband Internet access end-users. By co-locating an INTERVU Media Delivery Center (MDC) on Covad's broadband-optimized network, Covad will have the ability to provide end-users with direct and immediate access to rich content.

December 6, 1999: Covad and RealNetworks, Inc., the recognized leader in media delivery on the Internet, reached an agreement to conduct broadband streaming media trials over high-speed DSL lines.

April 1999: Covad entered into the consumer market with the introduction of its TeleSurfer service, which provides consumers with an affordable, secure, and ultra-fast connection to the Internet.

DBAB Analysts' Comments "Covad is the first net-centric services provider to provide broadband local infrastructure on a national basis and offer local transport for high speed data communications services using xDSL, packet-based technology. Utilizing xDSL technology, Covad's service runs over dedicated copper telephone lines to homes or businesses from the incumbent local exchange carrier's (ILEC) central office, rather than over a shared network like cable modems or using wireless solutions. Covad is a packet-based net-centric services provider that offers service to corporations and ISPs that require greater bandwidth and higher levels of support in order to meet the needs of their internal and external customers." *(Statement by Deutsche Banc Alex. Brown Analyst, Michael Bowen.)*

Financial Details

DBAB Rating	**Strong Buy**
Analyst	
Michael Bowen	
410 895 3264	
Price (5/12/2000)	$21.94
52 wk Hi-Lo	$66-$20
Shares Outstanding	146.99M
Float	87.85M

	1999A	2000E	2001E
EPS	**($1.81)**	**($3.50)**	**($3.97)**
Revenues (Mil)	**$66.5**	**$273.7**	**$560.0**

Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$216,038
Accounts Receivable, net	$15,393
ST Investments	$551,319
Unbilled Revenue	$5,419
Inventories, net of reserves	$8,547
Prepaid Expenses	$6,048
Other Current Assets	$1,219
Network & Communication Equipment	$233,260
Computer Equipment	$24,057
Furniture & Fixtures	$4,383
Leasehold Improvements	$6,884
Land	$1,120
Resticted Cash	$63,308
Deposits	$1,131
Deferred Debt Issuance Costs, net	$12,369
Deferred Charge, net	$20,529
Other LT Assets	$8,744
Total Assets	$1,147,606
Liabilities & Equity	
Accounts Payable	$41,126
Unearned Revenue	$5,238
Accrued Network Costs	$8,798
Other Accrued Liabilities	$27,104
Current Portion of Capital Lease	$268
LT Debt	$374,737
LT Capital Lease	$44
Shareholders' Equity	$690,291
Total Liabilities & Shareholders Equity	$1,147,606
Income Statement* (000s)	
Revenues	$66,488
Operating Expenses:	
Technical & Network Op.	($55,347)
S,M,G&A	($140,372)
Amortization of deferred compensation	($4,768)
Depreciation & Amortization	$37,602
Total Operating Expenses	($238,089)
Operating Income (Loss)	($171,601)

* As of December 31, 1999.

Cypress Communications, Inc. (CYCO)

www.cypresscom.net

15 Piedmont Center, Suite 710, Atlanta, GA, 30305

Management Stanley Allen, CEO; Barry Boniface, CFO

Description Cypress Communications, is a provider of a variety of communications services, including local and long distance voice, Internet access, web site hosting and other services, to small and medium-sized businesses (SMEs) located in multi-tenant office buildings. Cypress also designs, installs, owns and manages in-building vertical communication infrastructures that normally run inside vertical utility shafts from the building's basement to the top floor. Cypress is considered a BLEC (Building Local Exchange Carrier) because of its ability to network the insides of buildings.

Cypress is an ISP (Internet Service Provider) that offers a full suite of Internet service products, including domain name hosting and registration, e-mail, Web hosting, business LAN connectivity and many unique value-added business services. Cypress's strategy includes controlling the critical "last few feet" between their customers and out-of-building networks to position themselves as "gatekeeper" to their in-building customers. There are two systems in Cypress's network: 1). Riser System (designs, installs, owns and manages a vertical communication infrastructure that typically runs inside vertical utilities shafts from the building's basement to the top floor); 2). Feeder System (designs, installs, owns and manages a horizontal communication infrastructure that typically runs from the riser systems into customer' premises).

Strategy Cypress enhances the value of the office buildings by installing state-of-the-art digital and fiber-optic systems in order to deliver a full menu of telecom services. Video services include DirecTV Digital Satellite Business Television (where available), Cypress Business Television (CBTV), which delivers custom CBTV programming packages with an emphasis on business and financial news, Bloomberg Television, MSNBC, CNN Financial, Sports Packages, Entertainment Packages, and Local Network Affiliates. Cypress provides the tenant with advanced digital desktop equipment, local, long distance, voice and data cabling, on premise maintenance and dedicated service from one company with one bill.

Cypress began their first in-building network in June 1996 and as of December 31, 1999, they were operating 116 in-building networks in 12 markets, representing 30 million square feet. Cypress has agreements with building owners and property managers to install and operate networks in more than 730 buildings representing more than 229 million rentable square feet in 50 major metropolitan areas. As part of its licensing agreements, Cypress has obtained access in exchange for a revenue-sharing arrangement with the following real estate companies: AEW, Allegis, Boston Properties, Brookfield, Cornerstone, Cousins, Lend Lease, McCord Development Mezzanine Investors, Principal Office Investors, Shorenstein, SJ Plaza, Tower Realty, Transwestern, TrizecHahn, Vornado, Westbrook and 101 Park. Some competitors, such as Allied Riser Comm., Broadband Office and OnSite Access, are attempting to gain access to office buildings in Cypress's target markets. Cypress also faces competition from fixed wireless service providers, DSL providers and cable-based service providers. ISPs, such as Concentric Networks, EarthLink and PSINet, provide Internet access to residential and business customers, generally using existing communication infrastructure.

Financial Details

Price (5/12/2000)	$11.81
52 wk Hi-Lo	$30-$10
Shares Outstanding	47.30M
Float	47.30M
Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$69,475
Accounts Receivable, net	$1,665
Prepaid Expenses and Other	$321
Property & Equipment, net	$71,461
License Agreements	$23,398
Tenant Contracts, net	$275
License Agreements	$23,398
Other Assets	$692
Total Assets	$122,854
Liabilities & Equity	
Account Payable	$12,672
Accrued Expenses	$2,696
Current Portion of Capital Lease	$217
LT Portion of Capital Lease	$283
Preferred Stock	$100,278
Shareholders' Equity	$6,708
Total Liabilities & Shareholders Equity	$122,854
Income Statement* (000s)	
Revenues	$7,437
Operating Expenses:	
Cost of Services	($4,967)
Sales & Marketing	($4,007)
General & Administrative	($11,23
Depreciation & Amortization	($2,198
Total Operating Expenses	($22,4(
Operating Income (Loss)	($14,9(

* As of December 31, 1999.

Under property-specific license agreements, Cypress is granted a license to install and operate their networks in a building in return for approximately 3%-6% of the revenues received from tenants in the building.

Existing alternative technologies include DSL technology (144,000 bps), cable modems (1.5Mbps), wireless technologies (400,000bps), ISDN (128,000 bps) and Internet telephony. The network related capital expenditures are made after a long-term license agreement with a property owner has been signed. Initial capital expenditures in a typical building with approximately 335,000 rentable square feet are usually less than $90,000, which includes the purchase and installation of the riser system and associated network equipment. Customers currently subscribe to delivery speeds between 64,000 bps to 3 Mbps, but we have the capacity to deliver up to 100 Mbps in response to customer demand. Cypress's network includes a state-of-the-art riser system utilizing fiber-optic cable, broadband coaxial cable and copper wire; high capacity leased facilities connecting networks.

Diamond Technology Partners, Inc (DTPI)

www.diamtech.net
15 Piedmont Center, Suite 710, Atlanta, GA, 30305
Management Melvyn Bergstein, Chairman/CEO; Karl Bupp, CFO

Description Diamond Technology is an e-commerce consulting firm that serves clients primarily in the telecom, energy, financial services, insurance, healthcare, consumer products, and consumer services industries.

Strategy Diamond is about innovation and finding the breakthrough killer apps for their clients. They are working with Simon Property Group's Clixnmortar.com. The first of the killer applications (apps) was Fast Frog (www.fastfrog.com), a unique interactive retail shopping experience for teenagers. Fast Frog blends "place and space" by allowing teenage users to shop across multiple mall stores and scan desired items into a hand-held (PDA) device. Before leaving the mall, they can upload their wish list from the device to a personal website, which they can then make available to family and friends to review and to make purchases.

Thede Loder, a partner with Diamond, headed up The Locomotive Project, an initiative launched to encourage and enable development of a Java-based Web application servers and to solve common problems of Web infrastructure. Another partner, Larry Downes, is the co-author of the best-selling book, "Unleashing the Killer App: Digital Strategies for Market Dominance."

Recent Events *As of December 31, 1999,* Diamond's client-serving professional headcount grew to 433, up from 234 at the end of 1998.

In October 1999, Diamond acquired Leverage Information Systems, Inc, a systems architecture and development company specializing in the building of complex web sites and intranets. Under the term of the acquisition, Diamond paid $1 million in cash and issued 97,500 shares of the Class A common stock.

Financial Details

DBAB Rating	**Strong Buy**
Analyst	
Mark D'Annolfo	
617-261-3708	
Price (5/12/2000)	$76.00
52 wk Hi-Lo	$107-$14
Shares Outstanding	20.73M
Float	19.22M

	1999A	2000E	2001E
EPS	**$0.42**	**$0.62**	**$1.00**
Revenues (Mil)	**$136.2**	**$227.0**	**$331.4**

Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$46,997
Accounts Receivable, net	$12,496
Prepaid Expenses	$6,546
Deferred Income Tax	$735
Property & Equipment, net	$8,069
Intangible Assets, net	$9,821
Other Assets	$6,725
Total Assets	$91,389
Liabilities & Equity	
Accounts Payable	$3,447
Note Payable, current	$500
Other Accrued Liabilities	$11,863
Note Payable	$500
Shareholders' Equity	$75,079
Total Liabilities & Shareholders Equity	$91,389
Income Statement* (000s)	
Revenues	$92,825
Operating Expenses:	
Prpject Personnel	($49,618)
Professional Development	($8,833)
Sales & Marketing Expense	($5,007)
General & Administration	($12,660)
Total Operating Expenses	($76,118)
Operating Income (Loss)	$16,707

* As of December 31, 1999. Income Statement 9 months.

DSL.Net, Inc. (DSLN)

www.dsl.net
545 Long Wharf Drive, New Haven, CT, 06511
Management Paul Sunn, Chairman; David Struwas, CEO; Robert Berlin, CFO

Description DSL.net provides high-speed data communications and Internet access services using digital subscriber line, or DSL, technology to small and medium sized businesses (SME), targeting select second and third tier cities with populations less than 900,000. DSL.net was incorporated on March 3, 1998 and completed its IPO in October 1999.

Strategy DSL.net features unlimited high-speed Internet and e-mail access 24 hours a day, 7 days a week. The speed provided dramatically exceeds those of dial-up connections in both upstream and downstream directions. The amount of data that flows from the customer site to the Internet is upstream bandwidth, and the amount of data that flows from the Internet to the customer site is the downstream bandwidth. DSL.net provides sDSL, which is one B2B solution. sDSL refers to Symmetric Digital Subscriber Line and provides the same bandwidth in both directions, upstream and downstream. sDSL provides transmission speeds within a T1/E1 range, of up to 1.5 Mbps at a maximum range of 12,000-18,000 feet from a central office over a single-pair copper wire. This option is ideal for SMEs that have an equal need to download and upload data over the Internet.

Recent Events *On March 7, 2000,* DSL.net formed an agreement with Covad, where Covad's broad footprint complements their expanding national presence of over 140 Tier II and Tier III cities across the U.S. DSL.net has the ability to resell Covad DSLs, but Covad does not have a reciprocal agreement by which to sell DSL.net's lines.

On February 25, 2000, DSL.net partnered with iBEAM Broadcasting, a leading Internet broadcast network, in order to deliver streaming content to DSL.net's business customers. This relationship enables DSL.net's customers to experience VHS-quality video and CD-quality audio streams from leading content providers.

On February 11, 2000: DSL.net's relationship with Staples continues to develop, in which Staples will market DSL.net's offerings to SME customers through its retail stores, direct marketing sales force, catalog and Web site. About 75% of the Staples stores are located within ten miles of a DSL.net occupied central office.

DBAB Analysts' Comments "DSL.net has established a first-mover advantage in the underserved Tier II markets (generally, cities with populations less than 900,000). It is less expensive to co-locate in Tier II/III than those in Tier I cities, generally costing $20,000-$25,000 per collocation in Tier II markets versus $70,000 or more in Tier I markets." *(Michael Bowen, "DSL.net Expands Reach to Tier I Markets Via Covad Agreement," First Call note dated March 7, 2000.)*

"On average, Covad Communications and NorthPoint Communications invest about $100,000-$130,000 in each central office entered compared with approximately $60,000 for collocation and central office equipment (excluding lines) in the Tier II markets targeted by DSL.net. In fact, we estimate that Rhythms NetConnections invests twice as much in capital equipment than Covad and NorthPoint, and therefor substantially more than DSL.net in an effort to provide increased bandwidth and enhanced software and value-added services...Customers pay an installation charge and a monthly fee for the NETgain service. The monthly fee does not vary by number of users or usage, although it does vary based on the speed of the connection. For example, NETgain 400 provides a maximum speed to/from the customer of 416 Kbps, a maximum distance from the Central Office of 18,000 feet, and a price of $299, whereas the NETgain 1500 provides a maximum speed to/from sthe customer of 1.5 Mbps, a maximum distance from the central office of 9,000 feet, and a price of $549." *(Michael Bowen, "Resuming Research Coverage with a BUY Investment Rating," First Call note dated February 28, 2000.)*

Financial Details

DBAB Rating	**Buy**
Analyst	
Michael Bowen	
410 895 3264	
Price (5/12/2000)	$11.00
52 wk Hi-Lo	$33-$7
Shares Outstanding	64.31M
Float	64.31M

	1999A	2000E	2001E
EPS	($2.05)	($1.74)	($1.64)
Revenues (Mil)	$1.3	$30.5	$112.5

Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$66,178
Marketable Securities	$13,274
Accounts Receivable, net	$319
Prepaid Expenses and Other Current Assets	$1,044
Fixed Assets, net	$32,665
Intangible Assets	$3,420
Other Assets	$732
Total Assets	$117,632
Liabilities & Equity	
Accounts Payable	$9,587
Accrued Salaries	$849
Accrued Liabilities	$3,173
Deferred Revenue	$234
Current Portion Capital Lease	$716
Current Portion Note Payable	$281
Capital Lease Payable	$893
Note Payable	$1,165
Shareholders' Equity	$100,733
Total Liabilities & Shareholders Equity	$117,632
Income Statement* (000s)	
Revenues	$1,313
Operating Expenses:	
Technical & Network Operations	($9,234)
Sales & Marketing Expense	($6,848)
General & Administration	($4,979)
Stock Compensation	($4,123)
Total Operating Expenses	($25,184)
Operating Income (Loss)	($23,871)

* As of December 31, 1999.

Excite@Home (ATHM)

www.excitehome.net
450 Broadway Street, Redwood City, CA, 94063
Management George Bell Chairman/CEO; Kenneth Goldman, CFO

Description Excite @ Home is a broadband media company that offers media services through Excite and Blue Mountain Arts, and broadband subscription services through @Home and @Work. The company has a worldwide footprint of 87 million cable homes under contract, an addressable broadband market of 24 million upgraded homes, and 1.15 million broadband subscribers.

Strategy The company's vision reflects a commitment to providing home and business customers with 24-hour access to advanced, personalized services at different speeds over numerous communications devices, including PCs, pagers, cellular phones, and television sets. Excite@Home utilizes the high-speed, "always on" attributes of cable to provide residential subscribers with multimedia content. Excite@Home operates its own national infrastructure, connected to the Internet.

@Home is a consumer service that connects residential customers to the Internet over cable modems and a high-speed data network, providing interactive services to residences and businesses via its own network architecture, telco circuits and the cable industry's hybrid-fiber coaxial infrastructure.

@Work offers business customers high-speed Internet connectivity plus Website and e-commerce hosting. Over 5,100 businesses now use @Work's high-speed access services. @Work enables businesses to connect their LANs to the Internet and extend their corporate LANs to employees working at home. @Work uses hybrid fiber optic coaxial technology and traditional telco fiber circuitry.

Traffic growth on the Excite network rose to 123 million average daily page views in December 1999.

Recent Events *On February 28, 2000,* Excite@Home became a member in the SyncML Initiative. SyncML, formed by IBM, Lotus, Motorola, Nokia, Palm Inc. and Starfish Software, develops and promotes a single, common data synchronization protocol to make data and personal information consistent across multiple networks, platforms and devices. SyncML is an XML-based synchronization protocol designed to offer consumers more flexibility in sharing information with their mobile devices.

On October 27, 1999, the company completed the acquisition of iMALL, Inc., with an approximate fair value of $347 million. iMALL provides electronic commerce services and solutions to SMEs, enabling them to sell their products over the Internet.

On October 23, 1999, Excite@Home and Hartford House, Ltd., the operator of the Bluemountain.com web site, entered into a merger agreement

DBAB Analysts' Comments "We believe there are five "killer apps," including 1) Our favorite, the program guide, 2) Enhanced broadcasting, 3) Virtual channel/walled garden, 4) Time-shifting (hard drive, video-on-demand, and streaming video), and 5) Communications services (e-mail, chat, instant messaging, and telephony)...The Deutsche Banc Alex. Brown golden rules for successful Enhanced TV companies include: 1) The service provider is the gatekeeper, 2) TV-centric implementation wins, 3) The power of the network is as crucial as the power of the set-top, 4) Don't underestimate one-way data, and 5) The devil is in the details-implementation and integration issues are real." *(Larry Marcus, "DBAB Enhanced TV/Broadband CEO Roundtable Conference Postview," First Call note dated February 14, 2000.)*

Excite@Home

Financial Details

DBAB Rating	**Market Perform**
Analyst	
Larry Marcus	
415 617 4202	
Price (5/12/2000)	$19.94
52 wk Hi-Lo	$81-$16
Shares Outstanding	351.95M
Float	277.16MM

	1999A	2000E	2001E
EPS	($0.04)	($0.27)	($0.15)
Revenues (Mil)	$420.4	$723.0	$1,130.0

Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$224,548
ST Investments	$300,675
Accounts Receivable	$52,253
Accounts Receivable - Related Parties	$18,279
Other Current Assets	$35,151
Property, Plant & Equipment, net	$176,077
Investment in affiliated companies	$19,015
Other Investments	$273,005
Distribution Agreements	$313,772
Goodwill & Other Intangible Assets, net	$7,614,847
Other Assets	$76,657
Total Assets	$9,104,279
Liabilities & Equity	
Accounts Payable	$44,781
Accpimts Payable - Related Parties	$22,916
Accrued Compensation and related expenses	$15,632
Deferred Revenue	$56,844
Other Accrued Liabilities	$63,044
Current Portion of Capital Lease	$38,666
Convertible Notes and Debentures	$736,294
Capital Lease and other obligations	$52,552
Other Liabilities	$6,533
Shareholders' Equity	$8,067,017
Total Liabilities & Shareholders Equity	$9,104,279
Income Statement* (000s)	
Revenues	$336,955
Operating Expenses:	
Operating Costs	($143,056)
Product Development	($54,805)
Sales & Marketing	($130,725)
General & Administrative	($30,276)
Cost and Amortization of distribution agreements	($291,967)
Amortization of Intangibles	($1,157,009)
Total Operating Expenses	($1,807,838)
Operating Income (Loss)	($1,470,883)

* As of December 31, 1999.

Frontline Capital Group, Inc. (FLCG)

www.frontlinecapital.com

1350 Avenue of the Americas, New York, NY, 10019

Management Donald Rechler, Chairman; Scott Rechler, CEO; Michael Maturo, CFO

Description Frontline Capital (formed on July 15, 1997) acquires interest in and develops business-to-business, or B2B, e-commerce and e-services Internet companies, referred to as Partner Companies. The network of companies focus on serving small and medium sized enterprises (SMEs). As of March 24, 2000, Frontline Capital had invested roughly $316.8 million in 13 Partner Companies and one internally developed company. Frontline Capital was spun off from Reckson Associates in May 1998.

Strategy Frontline Capital acquires long-term ownership stakes in Partner Companies and integrates them into a synergetic network of companies, in order to accelerate their growth. Frontline supplies the partner companies with operational support and strategic guidance through their internal management resources, advisory board, and proprietary business development initiatives. Frontline actively works with Partner Companies to facilitate strategic relationships that provide access to the intellectual capital, assets and customer base of their entire network.

Frontline has developed an e-cooperative platform that enables Partner Companies to tap the expertise of four broad areas 1). Enterprise Development Group (eDG) offers strategic planning expertise (operations, organizational design, sales and marketing, human resources and recruiting, legal, finance and technology strategy). 2). Advisory Board provides insight and access to new opportunities. 3). Network of Partner Companies cross-fertilizes knowledge and fosters collaboration. 4). Click and Mortar works on global virtual and physical workplace solutions, including broadband connectivity. The Partner Companies may generally be characterized as offering Internet outsourcing solutions, e-commerce or infrastructure (deliver or enable delivery of goods and services over the Internet), and virtual bricks and mortar (combine virtual and physical infrastructure to deliver services). Frontline's partner network includes the following:

Recent Events In May 2000, Frontline's VANTAS plans to complete the merger with CarrAmerica's HQ Global. The merger was announced on January 21, 2000 with a value of $1 billion. VANTAS/HQ Global Workplace will be the largest U.S. executive suite company. Frontline Capital will retain an 81% interest in the company.

- On April 4, 2000, Frontline Capital announced the sale of 2.6 million shares of common stock at a price of $47.25 per share.
- On March 16, 2000, RE/Locate, a Partner Company, launched RealtyIQ.com.
- On March 8, 2000, an investment in UpShot.com.
- On February 29, 2000, acquired an interest in iXL, Inc.
- On February 9, 2000, an interest in LiveCapital.com.
- On December 15, 1999, OnSite Access filed a registration statement with SEC regarding IPO of common stock.
- On December 14, 1999, an investment in RealtyIQ.com, AdOutlet.com and DigitalWork.
- In November 1999, an investment in Giftcertificates.com and CommerceInc.
- In September 1999, an investment in Opus360.

Partner Company	Inv. Capital ($ Millions)	Profile
OnSite Access	$46.0	A BLEC providing integrated communications services
VANTAS Incorp.	211.5	A virtual and physical office solutions provider
UpShot.com	16.0	Web-based sales management solutions for SMEs
EmployeeMatters	10.0	A fully-integrated e-administration outsourcing company (employee benefit and human resources)
LiveCapital.com	7.5	*Marketplace through which SMEs may acquire financing*
RealtyIQ.com	13.7	Provider of e-commercial real estate information
CommerceInc Corp.	4.9	e-infomediary focused on B2B e-commerce
AdOutlet.com	2.0	Marketplace for advertising space across all media platforms
DigitalWork, Inc.	2.0	A B2B portal for SMEs providing information on multiple business tasks
NeoCarta Ventures	2.0	A strategic investment into a venture capital fund
Opus360 Corp.	1.0	Marketplace for knowledge workers and project opportunities
GiftCertificates.com	0.2	A leading e-commerce provider of gift certificates
OneXstream, Inc.	na	Business portal offering Frontline's e-services to SMEs

Financial Details

Price (5/12/2000)	$17.19
52 wk Hi-Lo	$68-$12
Shares Outstanding	32.03M
Float	32.03M
Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$32,740
Restricted Cash	$21,572
Accounts Receivable	$8,426
Other Current Assets	$16,008
Ownership Interests in Partner Companies	$61,207
Other Ownership Interest	$36,626
Intangible Assets, net	$239,412
Property & Equipment, net	$80,425
Other Assets, net	$45,567
Total Assets	$541,983
Liabilities & Equity	
Accounts Payable and Accrued Expenses	$51,383
Current Portion of Notes Payable	$125,000
Deferred Rent Payable	$2,165
Other Current Liabilities	$1,139
Credit Facilities with Related Parties	$121,848
Secured Credit Facility	$44,407
Notes Payable	$108,125
Deferred Rent Payable	$22,794
Other Liabilities	$28,175
Shareholders' Equity	$114,109
Total Liabilities & Shareholders Equity	$541,983
Income Statement* (000s)	
Revenues	
Executive Office Suite Income	$124,564
Support Services and Other	$90,812
Total Revenues	$215,376
Operating Expenses:	
Cost of Revenue	($175,454)
Partner Company General & Admin.	($11,995)
Total Operating Expenses	($187,449)
Partner Company Operating Income (Loss)	$27,927

*As of December 31, 1999.

Global Crossing Ltd (GBLX)

www.globalcrossing.com
Wessex House, 45 Reid Street, Hamilton, HM12, Bermuda
Management: Gary Winnick, Chairman; Leo Hindery, Jr., CEO

Description Global Crossing is a provider of global broadband communication services and is developing a seamless global fiber optic network to provide telecommunications carriers and Internet service providers. Global Crossing's services include voice; data transport; virtual private network (VPN); international private line (IPL); web hosting services; advanced voice and data services; advanced Internet services; structured bandwidth services; switched services; and Internet Protocol (IP) services.

Strategy The Global Crossing Network plans to have 101,000 route miles, serving 27 countries and more than 200 major cities. Upon completion, the network will link 5 continents and direct 80% of the world's international telecommunications traffic. Global Crossing's telecommunication services include web hosting, IP and data applications, long distance and local telephone and conference. Global Crossing consists of the following business segments:

Global Crossing Network is the fiber optic cable systems that interconnect the world in a seamless network. Those include: Atlantic Crossing-1, North American Crossing, Pan European Crossing, Racal Telecom Network, Pacific Crossing, Global Access Ltd., Hutchison Global Crossing, Mid-Atlantic Crossing. Under development includes: Atlantic Crossing-2, East Asia Crossing, Pan American Crossing and South American Crossing.

ILEC Services is one of the largest local exchange service providers in the U.S. The services are marketed under Frontier Telephone, a Frontier Communications Company. Digital switching platforms have been installed throughout the network. Global Crossing is pursuing expanding the capabilities to provide broadband solutions.

Global Marine Systems consists of two components: installation and maintenance. Global Marine is the most experienced marine engineering service company, specializing in the planning, installation and maintenance of undersea fiber optic cable systems.

Global Crossing offer its customers state-of-the-art technology, one-stop shopping, flexibility, competitive pricing and 24-hour customer service. Global Crossing offers capacities in the range of 155 Mbps to 10 Gbps. Global Crossing's services include data, carrier and enhanced services, ranging from network services, application services, collocation and DSL.

Recent Events *On May 10, 2000,* Global Crossing was awarded a contract by the Foreign and Commonwealth Office in London to provide managed voice, data and messaging services to 240 British Embassies, Consulates, High Commissions and diplomatic missions world-wide for over 10 years.

On March 28, Global Crossing announced an equity investment in WebEx, the company that powers interactive communications on the Web.

On February 22, Global Crossing announced its plans to acquire Ixnet, Inc., a provider of IP-based network services to the global financial services community, and its parent company, IPC Communications, valued at approximately $3.8 billion.

On January 12, Global Crossing and Hutchison Whampoa Limited formed a joint venture called Hutchison Global Crossing to pursue fixed-line telecommunications and Internet opportunities in Hong Kong.

On November 24, 1999, the Asia Global Crossing joint venture was formed, in which Global Crossing contributed their development rights of an approximately 11,000 mile undersea network that will link several countries in eastern Asia), and their 58% interest in Pacific Crossing, an undersea system connecting the U.S. and Japan.

On November 24, Global Crossing completed their acquisition of Racal Telecom for approximately $1.6 billion in cash. Racal Telecom owns an extensive fiber network in the United Kingdom, consisting of approximately 4,650 route miles of fiber and reaching more than 2,000 cities and towns.

On September 28, Global Crossing acquired Frontier Corporation valued at over $10 billion. Frontier is one of the largest long distance telecommunications companies in the U.S.

On July 2, Global Crossing acquired Global Marine Systems division of Cable & Wireless Plc for approximately $908 million.

Financial Details

Price (5/12/2000)	$32.63
52 wk Hi-Lo	$64-$20
Shares Outstanding	818.7M
Float	na
Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$1,633,499
Restricted Cash	$93,294
Accounts Receivable, net	$966,973
Other Assets and Prepaid Costs	$252,767
Restricted Cash	$138,118
Accounts Receivable	$52,052
Intangible Assets, net	$9,557,422
Property & Equipment, net	$6,026,053
Investments in Affiliates	$323,960
Other Assets, net	$661,442
Total Assets	$19,705,580
Liabilities & Equity	
Accounts Payable	$509,866
Accrued Construction Costs	$275,361
Accrued Cost of Access	$154,285
Accrued Liabilities	$280,629
Accrued Interest & Preferred Dividends	$66,745
Deferred Revenue	$127,367
Income Taxes Payable	$140,034
Credit Facilities with Related Parties	$121,848
Current Portion of LT Debt	$5,496
Other Current Liabilities	$292,810
LT Debt	$5,018,544
Deferred Revenue	$383,287
Deferred Credits and Other	$796,606
Shareholders' Equity	$9,218,515
Total Liabilities & Shareholders Equity	$19,705,580
Income Statement* (000s)	
Revenues	$1,664,824
Operating Expenses:	
Cost of Revenue	($850,483)
Operations, Admin. & Maintenance	($133,202)
Sales & Marketing	($149,119)
Network Development	($26,153)
General & Administrative	($210,107)
Stock Related Expense	($51,306)
Depreciation & Amortization	($124,294)
Goodwill and Intangibles Amortization	($127,621)
Total Operating Expenses	($1,672,285)
Partner Company	($7,461)
Operating Income (Loss)	

* As of December 31, 1999.

ICG Communications, Inc. (ICGX)

www.icgcom.com
161 Inverness Drive, Englewood, CO, 80112
Management J Shelby Bryan, Chairman/CEO; Harry Herbst, CFO

Description ICG is a competitive local exchange carrier (CLEC) and broadband data communications company, as well as a provider of network infrastructure, facilities and management. ICG evolved into a regional competitive access provider from a satellite communications company, offering voice and data services.

Strategy ICG provides high-quality telecom services, including local, long-distance and data communications, to businesses nationwide. Through personal service, competitive pricing, service reliability and a responsive approach, ICG is proving itself a superior alternative to the Regional Bell Operating Companies (RBOCs). ICG provides telecommunications services to customers in California, Colorado, Ohio, Texas, and parts of the Southeastern United States, in addition to these six markets: Boston, New York, Washington, D.C., Miami, Chicago and Seattle.

Recent Events *In February 2000,* ICG agreed to a common stock share exchange with Teligent, Inc and signed a Memorandum of Understanding (MOU) with Teligent in which both partners will identify and implement operating efficiencies between the two companies networks and services.

In February 2000, ICG announced an equity infusion of $750 million from investors that included affiliates of Liberty Media Corporation, Hicks, Muse, Tate & Furst Incorporated and Gleacher Capital Partners. The investment will be in the form of 8% convertible preferred stock and warrants.

In January 2000, ICG signed a vendor financing commitment letter with Cisco Systems Capital Corporation, the financing arm of Cisco Systems Inc., for up to $180 million. Purchases are for equipment that will expand access and transport capacity, plus provide greater capability and reliability for broadband deliveries.

In 1999, ICG signed a Memorandum of Understanding (MOU) with Covad Communications to jointly develop voice over digital subscriber line (VoDSL) technology to integrate voice and broadband data capability.

In 1999, ICG completed an aggressive capital program totaling $735.2 million that added significant long haul capacity, new voice and data switches, optical transmission equipment and new collocation sites.

In 1999, ICG upgraded the company's operating support systems with the installation of a state-of-the-art billing system and began to deploy a new end-to-end Telcordia OSS platform.

In 1999, ICG sold its Satellite Services and Fiber Optic Technologies divisions in order to focus on its core competency, being an Internet enabler.

In early 1999, ICG sold the Netcom customer base but retained the data network, which included 227 points of presence (POPs) and served approximately 700 cities nationwide.

In 1998, ICG purchased Netcom, a nationwide ISP for approximately $284.9 million.

Financial Details

Price (5/12/2000)	$23.13
52 wk Hi-Lo	$39-$14
Shares Outstanding	48.58M
Float	48.39M
Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$103,288
ST Investments	$22,219
Receivables, net	$167,273
Prepaid Expenses	$11,388
Property & Equipment, net	$1,525,680
Restricted Cash	$12,537
Investments	$28,939
Goodwill, net	$95,187
Deferred Financing	$35,884
Other Assets	$16,768
Total Assets	$2,020,621
Liabilities & Equity	
Accounts Payable	$112,291
Payable pursuant to IRU agreement	$135,322
Accrued Liabilities	$85,709
Deferred Revenue	$25,175
Deferred Gain on Sale	$5,475
Current Portion of Capital Lease	$8,090
Current Portion of LT Debt	$796
Current Liabilities of discontinued operations	$529
Capital Lease Obligation	$63,348
LT Debt	$1,905,901
Other LT Liabilities	$2,526
Shareholders' Equity	($843,864)
Total Liabilities & Shareholders Equity	$2,020,621
Income Statement* (000s)	
Revenues	$479,226
Operating Expenses:	
Operating Costs	($238,927)
Selling, General & Admin.	($239,756)
Provision for Impairment	($31,815)
Provision for Impairment	$31,815
Depreciation & Amortization	($174,239)
Other	($387)
Total Operating Expenses	($685,124)
Operating Income (Loss)	($205,898)

* As of December 31, 1999.

Intermedia Communications, Inc. (ICIX)

www.intermedia.com
3625 Quenn Palm Drive, Tampa, FL, 33619
Management David Ruberg, Chairman/CEO; Robert Manning, CFO

Description Intermedia Communications, Inc. is the largest independent provider of competitive local services and the largest provider of shared tenant telecommunications services in the United States. Intermedia provides integrated communications services, including local, long-distance, high-speed data and Internet services, to approximately 90,000 business and government customers. Intermedia is also an Internet Service Provider (ISP), a nationwide frame relay provider, and a provider of Web hosting services to Fortune 2000 companies. Intermedia's integrated portfolio of services fall into four major categories:

1. Local network services—local exchange services, special and switched access services and local private line services;
2. Enhanced data services—frame relay, ATM, high speed Internet services and Web hosting services;
3. Interexchange (long-distance) services;
4. Integration services—design, installation, sale and on-going maintenance of customer premise equipment such as private branch exchanges and key systems.

Strategy Intermedia was honored by Boardwatch magazine as a "Top Three" U.S. Internet backbone provider. The company believes transport provided on fiber optic systems has become commodity-like, and its capital expenditures are better focused on intelligent switching and other more strategic network components required to implement a packet/cell switched network. Intermedia has evolved to a Competitive Local Exchange Carrier (CLEC) and an Integrated Communications Provider. A CLEC is a category of telephone service providers (carriers) that offer services similar to the former monopoly of the local telephone company, as recently allowed by changes in telecommunications law and regulation. A CLEC may also provide other types of telecommunications services. Intermedia uses shared access services such as T1 lines, high speed Internet, and industry-leading frame relay networks. Frame Relay offers the customer all the advantages of private data circuit lines without distance or packet charges.

Recent Events *On January 26, 2000,* the company announced that Intermedia Business Internet's symmetrical DSL solution provides equal bandwidth upstream and downstream from 128K to 1.04M. DSL service is currently available in 7 U.S. cities: Atlanta, Austin, Boston, Chicago, Dallas, New York and San Francisco. Los Angeles, Houston, Washington DC are recent additions. Eight additional cities are planned for 2Q 2000, including Denver, Detroit, Cincinnati, Cleveland, Philadelphia, Pittsburgh, Miami and Tampa.

On March 13, 2000, Intermedia secured an agreement with Advanced Switching Communications for purchase of MultiStream technology. MultiStream incorporates technology that bundles two or more high-speed connections, providing Intermedia a platform to offer businesses an unprecedented variety of broadband access options. MultiStream effectively bridges the bandwidth and cost gap between relatively inexpensive, easily available T1 circuits (1.5 Mbps) and expensive, often hard to obtain T3 circuits (45 Mbps).

In April 1999, the company announced that it has entered into strategic alliances with two DSL companies, NorthPoint Communications and Rhythms NetConnection Inc. These agreements will allow the company to purchase DSL transport to provide additional telecommunications services such as high speed Internet access, local and long distance services, and frame relay to Intermedia's small and medium sized customers on a more economical basis.

Financial Details

Price (5/12/2000)	$33.94
52 wk Hi-Lo	$77-$18
Shares Outstanding	52.62M
Float	51.92M
Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$240,827
Restricted Investments	$10,252
Accounts Receivable	$287,771
Prepaid Expenses and Other Current Assets	$38,289
Telecommunications Equipment, net	$1,713,220
Intangible Assets, net	$948,215
Other Assets	$57,848
Total Assets	$3,296,422
Liabilities & Equity	
Accounts Payable	$106,918
Accrued Taxes	$15,542
Accrued Interest	$32,822
Other Accrued Expenses	$33,967
Advance Billings	$21,832
Current Portion of LT Debt	$5,632
Current Portion of Capital Lease	$26,445
LT Debt	$2,503,911
Capital Lease Obligations	$431,299
Shareholders' Equity	($852,705)
Total Liabilities & Shareholders Equity	$3,296,422
Income Statement* (000s)	
Revenues	
Data, Internet and Web hosting	$361,457
Local access and voice	$414,242
Integration	$130,336
Total Revenues	$906,035
Operating Expenses	
Cost of Goods Sold	($83,362)
Facilities Admin. & Maintenance	($103,417)
Network Expenses	($371,180)
Selling, General & Admin.	($294,382)
Depreciation & Amortization	($329,303)
Deferred Compensation	($1,540)
Business Restructuring	($27,922)
Total Operating Expenses	($1,211,106)
Operating Income (Loss)	($305,071)

* As of December 31, 1999

Level 3 Communications (LVLT)

www.level3.com
1025 Eldorado Blvd., Broomfield, CO, 80021
Management Walter Scott Jr., Chairman; James Crowe, CEO; R. Douglas Bradbury, CFO

Description Level 3 Communications, Inc. engages in the information services, communications and coal mining businesses through ownership of operating subsidiaries and substantial equity positions in public companies. Level 3 is a telecommunications and information services company that plans to build an advanced, international facilities-based communications network based on Internet Protocol technology. Level 3 Communications was originally founded in 1985 as Kiewit Diversified Group Inc. (KDG), a wholly owned subsidiary of Peter Kiewit Sons, Inc., a 114-year-old construction, mining, information services, and communications company.

Strategy Level 3 is a communications and information services company offering a wide selection of IP-based services, including broadband transport, collocation services, submarine transmission services and the first Softswitch-based services. The Level 3 Network is expected to include metropolitan networks in 56 U.S. markets and 21 international markets connected by an approximately 16,000 mile U.S. intercity (long-distance) network, an approximately 4,750 mile European intercity network and both transpacific and transatlantic undersea cables. Level 3 plans to focus primarily on the Web-centric business market, using its IP-based network to provide a full range of communications services—including local, long distance, data transmission, as well as other enhanced services. Additionally, the company will offer a range of Internet access services at varying capacity levels. Level 3 is part of the move occurring from the traditional "circuit switched" networks designed for voice communications to "packet switched" networks using Internet Protocol, or IP. Level 3's business plan is built around the premise that as the cost to move a bit a mile a second continues to decline, the demand for bandwidth will continue to rise at an equal or greater pace.

Recent Events *On March 13, 2000,* Level 3 announced that it will provide space in its Brussels gateway to Web-based companies that offer Internet access, Web-site hosting, e-commerce services, pay-per-use software and other services. Level 3 created the term gateway to describe the major Internet and communications hubs of its network. The gateways are technical facilities that provide safe and secure space for customers' communication and networking equipment, house Level 3's own equipment, and link the company's networks to the public Internet and other commercial networks. Collocating servers and other electronics at Level 3 gateways enables Web-centric companies to rapidly provision Internet and communications services without the capital expense needed to build their own facilities.

On June 23, 1999, Level 3 announced a minimum four year, $250 million strategic agreement with Lucent to purchase Lucent systems, including new software switches of "softswitches." The softswitches are for Internet Protocol networks that is intended to combine the reliability and features from the public switched telephone network with the cost effectiveness and flexibility of Internet Protocol technology.

On March 31, 1998, PKS announced the separation of its construction and communication/information services business, establishing Level 3 as an independent corporation.

Financial Details

Price (5/12/2000)	$76.00
52 wk Hi-Lo	$132-$45
Shares Outstanding	365.7M
Float	271.1M
Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$1,219,000
Marketable Securities	$2,227,000
Restricted Securities	$46,000
Accounts Receivable	$148,000
Income Taxes Receivable	$241,000
Other Current Assets	$55,000
Property, Plant & Equipment, net	$4,287,000
Investments	$300,000
Other Assets, net	$381,000
Total Assets	$8,904,000
Liabilities & Equity	
Accounts Payable	$830,000
Current Portion of LT Debt	$6,000
Accrued Liabilities	$56,000
Accrued Interest	$47,000
Deferred Revenue	$111,000
Other	$75,000
LT Debt	$3,989,000
Other Liabilities	$218,000
Shareholders' Equity	$3,405,000
Total Liabilities & Shareholders Equity	$8,904,000
Income Statement* (000s)	
Revenues	$515,000
Operating Expenses:	
Cost of Revenue	($360,000)
Selling, General & Admin.	($668,000)
Depreciation & Amortization	($228,000)
Total Operating Expenses	($1,256,000)
Operating Income (Loss)	($741,000)

As of December 31, 1999.

Nextlink Communications, Inc. (NXLX)

www.nextlink.net

1505 Farm Credit Drive, McLean, VA, 22102

Management Daniel Francis Akerson, Chairman/CEO; William Hoglund, Interim CFO

[redacted]

Description Nextlink Communications, Inc. provides telephone and other telecommunications and data services to a targeted customer base of small and medium-sized businesses (SMEs). The company operates 23 facilities-based networks providing switched local and long distance services in 14 states. NEXTLINK operates local networks in 47 cities including New York, Los Angeles, Chicago, Atlanta, San Francisco Bay Area, Denver, Dallas, Miami, Salt Lake City, Nashville, and clusters in Orange County, California and central Pennsylvania. The company's product offerings include dial tone, direct inward and outward dialing, long distance service, voice messaging and directory listings and assistance. Networks may be used for facsimile, e-mail and other e-services. In 2000, the company plans to deploy data switching and transmission equipment, including Asynchronous Transfer Mode (ATM switches), routers, Internet Protocol (IP) and frame-relay facilities and Digital Subscriber Line (DSL) services. ATM switches enhance a wire to meet the demands of large, high-volume customers, while IP routers and switches carry Internet traffic more efficiently. NEXTLINK uses both fiber and wireless technologies to provide Internet-based end-to-end, broadband communications services to businesses.

Strategy Telecommunications pioneer Craig McCaw founded NEXTLINK in 1994 to deliver next-generation communications services to businesses over fiber optic facilities. NEXTLINK provides its services in 49 U.S. markets. NEXTLINK is the largest holder of fixed wireless spectrum in North America, with licenses covering 95 percent of the population in the top 30 markets in the United States. Additionally, NEXTLINK has acquired exclusive rights to a 16,000 mile high-speed, IP-centric fiber optic backbone network that will connect over 50 cities in the United States and Canada. NEXTLINK's goal is to provide their customers with complete voice and data network solutions for all of their communications needs, using fiber and switches. NEXTLINK has built 32 broadband local networks in 19 states, generally located in the central business districts (CBD) of cities.

NEXTLINK's local and national networks employ fiber optic technology, which uses light waves to transmit signals over cables consisting of many glass fiber strands. Each strand in these fiber optic cables has enough capacity to carry over 100,000 times more traffic than a strand of traditionally-configured copper wire. Rings of the fiber optic cables typically encircle a city's CBD and connect to NEXTLINK's central offices. These central offices contain the switches and routers that direct calls and data traffic to their destinations and have space to house the additional equipment necessary for future telecommunications services. NEXTLINK prefers to build and own the networks. The company constructs a new fiber optic extension from the network to the customer's premises, or a high-bandwidth wireless connection is deployed between an antenna on the roof of the customer's premises and an antenna attached to their fiber rings.

Recent Events On March 15, 2000, Nortel Networks was selected to provide broadband wireless, point-to-multipoint access equipment. NEXTLINK is currently using broadband wireless service to link customers to its local fiber optic rings in Dallas and Los Angeles. NEXTLINK acquired an exclusive right to use certain fibers as well as a conduit throughout a 16,000-mile high-speed, IP-center fiber optic backbone network that will connect over 50 cities in the U.S. and Canada.

Financial Details

Price (5/12/2000)	$71.06
52 wk Hi-Lo	$132-$33
Shares Outstanding	80.62M
Float	68.79M
Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$868,463
Marketable Securities	$1,013,301
Accounts Receivable, net	$80,746
Other Current Assets	$24,498
Pledged Securities	$40,759
Property & Equipment, net	$1,180,021
Investments in licenses	$933,128
Other Assets	$456,192
Total Assets	$4,597,108
Liabilities & Equity	
Accounts Payable	$81,841
Other Accrued Liabilities	$119,795
Accrued Interest Payable	$45,578
Current Portion of LT Debt	$2,003
LT Debt	$3,733,342
Other LT Debt	$15,319
Shareholders' Equity	($13,122)
Total Liabilities & Shareholders Equity	$4,597,108
Income Statement* (000s)	
Revenues	$274,324
Operating Expenses	
Operating	($221,664)
Selling, General & Admin.	($266,908)
Restructuring	$30,935
Deferred Compensation	$12,872
Depreciation	$93,097
Amortization	$15,378
Total Operating Expenses	($640,854)
Operating Income (Loss)	($366,530)

As of December 31, 1999.

On January 10, 2000, NEXTLINK and Concentric Network announced a $2.9 billion transaction to combine the companies. Concentric Network provides complete Internet business solutions for SMEs, including DSL access, Web hosting and e-commerce. The company also offers data center services, virtual private networks (VPNs), dedicated access, and application infrastructure services for delivering applications over the Internet or a VPN. In April 1999, NEXTLINK acquired WNP Communications, Inc. for $698.2 million. In this transaction, the company acquired wireless licenses covering an area where approximately 98 million people live or work and one B block LMDS wireless license covering an area where approximately 16 million people live or work. In January 1999, the company entered into a strategic agreement with Covad Communications. NEXTLINK is a preferred provider to Covad for local transport and colocation services. NEXTLINK invested $20 million in Covad.

Northpoint Communications Group (NPNT)

www.northpointcom.com
303 2nd Street, South Tower, San Francisco, CA, 94107
Management Michael Malaga, Chairman; Elizabeth Fetter, CEO; Michael Glinsky, CFO

Description NorthPoint Communications is the leading broadband competitive local exchange carrier (CLEC), providing affordable, dedicated high-speed Internet access over existing phone lines using Digital Subscriber Line (DSL) technology. The company's networks use DSL technology to enable data transport over telephone company copper lines at speeds up to 25 times faster than dial-up modems. NorthPoint markets its network and data transport services to ISPs, long-distance/local telephone companies and data service providers. The DSL-based local networks operate in 33 major U.S. markets, spanning 62 MSAs, with a goal of over 60 markets and 110 MSAs by the end of 2000.

Strategy Michael Malaga, who co-founded NorthPoint in 1997, pioneered the roll-out of DSL-based broadband services in the U.S. NorthPoint offers Symmetric DSL (sDSL), the same upload and download speeds. Customers can order DSL at 160 Kbps, 200 Kbps, 416 Kbps, 784 Kbps, 1.04 Mbps, and 1.54 Mbps. DSL bridges the "final mile" between broadband infrastructure and the consumer. NorthPoint is conducting development trials with the following companies:

- Akamai Techologies provides global Internet content, streaming media, and applications delivery services for hundreds of customers, improving Web site speed and reliability and enabling richer, more engaging Web site content.
- ClearBand's streaming video solution allows NorthPoint to multicast full-screen, TV-quality video to its subscribers.
- CoolCast is a video-enhanced Internet portal aggregating live, TV-quality video for PC users from branded media and entertainment providers and offers programming on video channels and streaming music on digital audio channels.
- Digital Island's relationship with NorthPoint is part of an overall network build-out with Digital Island's Footprint™ content distributors close to the ultimate consumer.
- Equinix IBX™ centers (Internet Business Exchange) provide content providers, ASPs and e-commerce companies with the ability to interconnect with carriers, ISPs, site and performance management companies in order to speed the flow of data over the Internet.
- iBEAM works with leading content providers to enhance the delivery of streaming media on their sites.
- Into Networks provides broadband subscribers with more than 100 leading entertainment, education, lifestyle and productivity CD-ROM titles.
- Media Station's family safe "Select Play" service gives users the ability to have dozens of top-selling CD-ROM games, sports, lifestyle and education titles on demand, in real-time from the worlds' interactive media giants all for a low monthly subscription fee.
- Microsoft—Leveraging their strategic alliance to accelerate broadband availability as part of their work with MSN and the Windows Media Broadband Jumpstart Program.
- On2.com is creating a revolutionary network of Web channels exclusively for broadband consumers.
- ZDTV via "Vidazzle" is a new international media streaming network whose principal backers are GE Capital and its satellite subsidiary, GE Americom.

Recent Events *On March 8, 2000*: NorthPoint formed a joint venture agreement with VersaTel, a Dutch competitive local access network provider, to provide Pan-European DSL services. The new company will be referred to as VersaPoint. NorthPoint and VersaTel contributed $50 million to the joint venture. Versatel's contribution included 36 existing central offices in Germany and 15 central offices in the Netherlands. VersaPoint will leverage NorthPoint's US-based DSL wholesale channel expertise, as well as VersaTel's fiber network in Germany and the Netherlands.

On February 16, 2000, NorthPoint and Call-Net Enterprises Inc. announced the formation of a joint venture created to deliver wholesale DSL-based broadband services to businesses in Canada.

On January 6, 2000, NorthPoint expanded its alliance with Microsoft to be the preferred DSL provider for Microsoft's MSN Internet Access offerings in Tandy's RadioShack stores located within NorthPoint's network footprint.

DBAB Analysts' Comments "Because xDSL obviates the need to replace the copper access loop, the economics of the offering are more attractive at lower service penetration rates than fiber to the curb. The limited overlap thus far of the three new xDSL providers should enable each to capture the requisite market share to achieve operating cash flow break even. The more key interconnection agreements and central office collocation agreements that each is able to lock will largely determine their number of remote LAN and ISP customers." *(Statement by Michael Bowen.)*

Financial Details

DBAB Rating	**Buy**
Analyst	
Michael Bowen	
410 895 3264	
Price (5/12/2000)	$16.50
52 wk Hi-Lo	$46-$11
Shares Outstanding	128.17M
Float	61.10M

	1999A	2000E	2001E
EPS	($2.02)	($2.83)	($1.81)
Revenues (Mil)	$21.1	$119.5	$263.2

Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$95,019
ST Investments	$115,034
Account Receivable, net	$10,558
Inventories	$4,439
Prepaid Expenses and Other Assets	$19,555
Property & Equipment, net	$227,124
LT Investment	$6,740
Deposits	$691
Total Assets	$479,160
Liabilities & Equity	
Accounts Payable	$56,004
Accrued Expenses	$25,675
Deferred ST Credits	$348
Capital Lease, current portion	$1,027
Capital Lease Obligation	$1,653
Deferred LT Credits	$1,392
Term Loan	$85,000
Shareholders' Equity	$308,061
Total Liabilities & Shareholders Equity	$479,160
Income Statement* (000s)	
Revenues	$21,140
Operating Expenses:	
Network Expenses	($50,354)
Selling, General & Administrative	($117,899)
Amortization of Deferred Stock	($5,406)
Depreciation & Amortization	($15,907)
Total Operating Expenses	($189,566)
Operating Income (Loss)	($168,426)

* As of December 31, 1999.

Qwest Communications International Inc.

www.qwest.com
700 Qwest Tower, 555 Seventeenth Street, Denver, CO, 80202
Management Joseph Nacchio, Chairman/CEO; Robert Woodruff, CFO

Description Qwest is a leading broadband Internet communications company engaged in the two core businesses of communications services and construction services. Communication services include Internet, multimedia, data and voice services. Internet and multimedia services include dedicated and dial up Internet access, web hosting, co-location access, voice over Internet Protocol, application hosting and mass storage services.

Strategy Qwest provides cutting-edge technology, abundant broadband capacity and key strategic alliances to its customers. Qwest's Internet infrastructure consists of a 2.4 gigabit IP backbone that covers over 25,500 miles in North America, with the global network extending through alliances with KPNQwest and others. Qwest also provides a 10 gigabit Macro Capacity Fiber Network that is used for the exchange of multimedia content. Qwest is developing CyberCenters, which are hosting centers that are directly connected to the Qwest backbone. These hosting centers are meeting the growing demand for application hosting, e-commerce, web-hosting services, co-location and other services.

Qwest has developed alliances with Microsoft, KPMG, Hewlett Packard, Oracle, Netscape, Rhythms NetConnections, Covad Communications, Advanced Radio Telecom and others.

Qwest's primary competitors include AT&T, Sprint, MCI WorlCom, GTE, UUNet, Digex, Intel, Exodus, Williams Communications, Level 3 Communications and Global Crossing.

Recent Events *On May 10, 2000,* Qwest announced their next generation Virtual Private Network (VPN) solution—Qwest VPN Service. The service features world-class quality-of-service, service level agreements, and network-based firewalls.

On March 27, IBM and Qwest announced a multi-year initiative to deliver next generation e-business services and applications through new Qwest CyberCenters™.

On January 18, Qwest and Allied Riser partnered to offer small and medium-sized business customers broadband access to the Qwest Internet backbone and Internet solutions.

On November 12, 1999, KPNQwest completed its IPO, issuing 50.6 million shares, or roughly 11% of the total shares.

In September 1999, Qwest and Anschutz Digital Media, Inc. formed a joint venture called Slingshot Networks LLC to provide advanced digital production, post-production and transmission facilities, digital media storage and distribution services, telephony-based data storage and enhanced services. Qwest contributed approximately $84.8 million.

In September 1999, Qwest invested $90 million in Advanced Radio Telecom for an approximate 19% stake.

In July 1999, Qwest entered into a definitive merger agreement with US West, Inc.

In June 1999, Qwest and KPMG LLP, formed a joint venture called Qwest Cyber.Solutions LLC. The venture will provide Internet-based end-to-end application service provider, application hosting and application management services. Qwest contributed approximately $60 million.

Financial Details

Price (5/12/2000)	$46.00
52 wk Hi-Lo	$66-$26
Shares Outstanding	753.0M
Float	104.4M
Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$349,200
Accounts Receivable, net	$1,136,700
Prepaid Expenses and Other Current Assets	$299,300
Property & Equipment, net	$4,108,700
Intangible and Other Assets, net	$1,194,100
Investment in KPNQwest	$680,000
Excess of Cost over assets acquired	$3,290,100
Total Assets	$11,058,100
Liabilities & Equity	
Accounts Payable	$209,900
Facility Costs Accrued and Payable	$275,400
Accrued Expenses and Other	$753,100
Debt and Capital Lease Obligations, net	$2,368,300
Other LT Liabilities	$394,900
Shareholders' Equity	$7,001,300
Total Liabilities & Shareholders Equity	$11,058,100
Income Statement* (000s)	
Revenues	
Communication Services	$3,703,100
Construction Services	$224,500
Total Revenues	$3,927,600
Operating Expenses:	
Access and Network Operations	($2,062,700)
Construction Services	($96,400)
Selling, General & Admin.	($1,009,300)
Depreciation & Amortization	($404,100)
Merger Costs	($31,500)
Total Operating Expenses	($3,604,000)
Operating Income (Loss)	$323,600

* As of December 31,

In April 1999, BellSouth Corporation and Qwest announced a strategic relationship, in which BellSouth invested approximately $3.5 billion for an approximate 10% equity stake in Qwest.

In April 1999, Qwest also formed a joint venture with KPN Telecom B.V., the Dutch telecommunications company, to create a pan-European IP-based fiber optic network, linked to Qwest's network in North America.

RCN Corporation (RCNC)

www.rcn.com
105 Carnegie Center, Princeton, NJ, 08540-6215
Management David McCourt, Chairman/CEO; Timothy Stoklosa, CFO

Description RCN Corp. is one of the nation's largest facilities-based providers of bundled communications services to the residential market. RCN is targeting the densest telecommunications markets in the country and operates in the Boston to Washington, D.C. and San Francisco to San Diego corridors, as well as in Chicago, its newest markets. With the combined $1.65 billion investment from Vulcan Ventures, RCN's network build is fully funded through 2002. RCN is developing advanced fiber optic networks to provide a wide range of

Strategy RCN's goal is to be the dominant provider of residential communications services over its own network in the densest markets. RCN's high-capacity local fiber-optic networks target densely populated areas comprising 44% of the US residential communications market spread over just 6% of its geography. RCN's lines feed into homes at 51 mbps, 1,000 times as fast as a conventional phone modem and 5 times as fast as a cable modem. RCN needs capital to fund the construction of its advanced fiber optic networks, upgrading its hybrid fiber/coaxial plant, fund operating losses and repay its debts. RCN estimates that its 2000 capital requirements could total $1 billion.

Recent Events *In December 1999,* RCN launched its West Coast operations with its entry into South San Francisco. RCN activated its Megaband Network, the first network designed and built around the Internet.

During 4Q 1999, Vulcan Ventures, Inc., which includes Paul G. Allen and Microsoft, committed to invest $1.65 billion in RCN in the form of a mandatorily convertible preferred stock deal.

In January 1999, RCN announced an agreement with Level 3 Communications that will provide RCN with a robust cross-country fiber backbone allowing connectivity to major Internet connection points in the U.S.

Financial Details

Price (5/12/2000)	$28.50
52 wk Hi-Lo	$75-$26
Shares Outstanding	78.12M
Float	49.00M
Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$391,412
ST Investments	$1,401,877
Inventory	$21,064
Intangible Assets, net	$138,491
Total Assets	$3,192,114
Liabilities & Equity	
Current Debt	$249,445
LT Debt	$2,143,096
Shareholders' Equity	$392,303
Total Liabilities & Shareholders Equity	$3,192,114
Income Statement* (000s)	
Revenues	$275,993
Operating Expenses:	
Operating Costs	($407,960)
Depreciation & Amortization	($146,043)
Total Operating Expenses	($554,003)
Operating Income (Loss)	($278,010)

As of December 31, 1999.

Total Service Connections 4Q99

Connection On-Net		Connection Off-Net	
Voice	62,733	Voice	46,986
Video	138,577	Video	153,627
Data	21,654	Data	523,728
Subtotal On-Net	222,964	Subtotal Off-Net	724,341
Total Service Connections	947,305		
Advanced Fiber Homes Passed	713,823		

Source: *Company Financials*

Rhythms NetConnections, Inc (RTHM)

www.rhythms.net
6933 South Revere Parkway, Englewood, CO, 80112
Management Catherine Hapka, Chairman/CEO; John Braukman, CFO

RHYTHMS™

Where Internet connections are moving.

Description Rhythms NetConnections, Inc. provides DSL-based, broadband communication services to businesses and consumers. The company offers a growing suite of features and applications that can be individually configured and installed. For large businesses, the company provides complete project management, including design, implementation and reporting. Through the company's network, multiple users may access the Internet and virtual private networks (VPN). Rhythms operates in 38 markets and 67 MSAs.

Strategy Rhythms' services include high-speed, "always on" connections to the Internet and private networks at speeds ranging from 144 Kbps to 7.1 Mbps (approximately 125 times the speed of today's fastest dial-up modem). Rhythms' customers include Internet service providers (ISPs), telecommunications carriers and broadband communication services resellers. The company must use copper telephone lines controlled by the incumbent carriers to provide DSL connections to customers. They also depend on the incumbent carriers for collocation and for a substantial portion of the transmission facilities they use to connect their equipment in incumbent carrier central offices to their Metro Service Centers. Rhythms relies on sales and marketing efforts of their strategic partners, including MCI WorldCom, Microsoft, Qwest and Cisco. Other Rhythms partners include: PSInet, Savvis, CAIS, Flashcom, DSL Networks, Telocity, Phoenix Networks and Intermedia. Rhythms technology partners include market-leading equipment and service providers such as Cisco Systems, Paradyne, Copper Mountain, Turnstone, Xylan and Netopia.

In terms of competitive carriers, Covad Communications Group, Inc. and NorthPoint Communications, Inc., have begun offering DSL-based access services. Regional ISPs and competitive carriers, including HarvardNet, Inc., Network Access Solutions Corp. and DSL.net, Inc. also offer DSL-based access services.

As of December 31, 1999, Rhythms had 12,500 DSL lines in service and it exceeded its facility deployment targets with 1,225 built or operational central office locations. In 2000, Rhythms projects it will expand its market to 70 MSAs and 2,000 central offices.

Recent Events *On February 14, 2000,* Rhythms announced a strategic alliance with Level 3 Communications, Inc. to market bundled Internet Protocol (IP) services that will enable the emerging Internet content, hosting, applications and service industries to capitalize on high-speed, cost-effective network access. Rhythms will connect its high-speed, fully IP-capable network to Level 3's fiber optic "gateway" facilities in 27 U.S. cities. Both companies will take advantage of Level 3's application hosting capabilities, rich customer base and IP network capacity, as well as Rhythms' high-speed DSL services. Rhythms and Level 3 will co-brand the service as a new product offering to emerging broadband service providers, application service providers (ASPs) and ISPs.

In February 2000, Rhythms obtained $875 million in additional financing, receiving a private equity infusion of $250 million from an affiliate of Hicks, Muse, Tate, & Furst Incorporated

DBAB Analysts' Comments "Rhythms focuses primarily on the direct sales channel though it currently has wholesale agreements with over 20 ISPs. Rhythms attempts to differentiate itself from Covad and NorthPoint by immediately providing data transfer ranges of 128Kbps to 7.1Mbps." *(Statement by Miachel Bowen.)*

Financial Details

DBAB Rating	**Buy**
Analyst	
Michael Bowen	
410 895 3264	
Price (5/12/2000)	$20.81
52 wk Hi-Lo	$78-$18
Shares Outstanding	78.58M
Float	47.74M

	1999A	2000E	2001E
EPS	($4.15)	($8.24)	($9.33)
Revenues (Mil)	$11.1	$60.9	$193.8

Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$48,247
ST Investments	$292,008
Restricted Cash	$36,707
Receivables	$10,844
Inventories	$4,071
Prepaid Expenses and Other Current Assets	8460
Equipment & Furniture, net	124831
Collocation Fees, net	$57,421
Restricted Cash	$59,526
Deferred Business Acquisition Costs, net	$18,425
Deferred Debt Issue Costs, net	$16,194
Other Assets	$8,690
Total Assets	$685,424
Liabilities & Equity	
Current Portion of LT Debt	$333
Accounts Payable	$30,895
Interest Payable	$8,787
Accrued Expenses and Other Current Liabilities	$23,163
LT Debt	$111
Senior Notes Payable	$505,696
Other Liabilities	$110
Shareholders' Equity	$116,287
Total Liabilities & Shareholders Equity	$685,424
Income Statement* (000s)	
Revenues	
Service & Installation, net	$11,089
Operating Expenses:	
Network & Service Expenses	($68,161)
Selling, Marketing, General & Administrative	($110,947)
Depreciation & Amortization	($12,639)
Amortization of Deferred Business Costs	($4,765)
Deferred Compensation	($3,742)
Total Operating Expenses	($200,254)
Operating Income (Loss)	($189,165)

* As of December 31, 1999.

Symbol Technologies, Inc. (SBL)

www.symbol.com

One Symbol Plaza, Holtsville, NY, 11742-1300

Management Dr. Jerome Swartz, Chairman/CEO; Kenneth Jaeggi, CFO O

Description Symbol Technologies, Inc., a manufacturer of bar code-driven data transaction systems, is engaged in the design, manufacture and marketing of bar code reading equipment, hand-held computers and radio frequency (RF) data communications systems. Symbol is the only corporation in its industry with the in-house technology. Symbol Technologies also designs, manufactures, markets and services scanner-integrated mobile and wireless information management systems.

Strategy Founded in 1975, Symbol Technologies is a global leader in mobile data management systems and services with innovative customer solutions based on wireless local area networking (LAN) for voice and data, application-specific mobile computing and bar code data capture. Symbol's wireless LAN solutions are installed at more than 45,000 customer locations, and more than seven million Symbol scanners and application-specific scanner-integrated mobile computer systems are in use worldwide. Symbol and its global network of business partners provide solutions for retailing, transportation and distribution logistics, parcel and postal delivery, healthcare, education, manufacturing and other industries.

In 1998, Symbol and Palm Computing, Inc., a subsidiary of 3Com Corporation and developers of the Palm line of hand-held computers, entered into an agreement whereby Symbol manufactured and distributed touch- and pen-input personal productivity tools utilizing the Palm operating system with an embedded bar code reading device.

The SPT 1500, introduced in 1998, is a pocket-sized mobile computing device based upon the Palm III architecture. In 1999, Symbol introduced the SPT 1700, a ruggedized version of the SPT 1500 with wireless LAN communication capability.

The CS 2000, introduced in 1999, is a miniature, laser-based memory scanner and Internet appliance designed for use in the consumer electronic retail market. The pocket size CS 2000 allows consumers to browse through retailers printed catalogues, advertisements and documentation, scan a bar code for items of interest, and quickly and efficiently order or obtain additional information on the item through the Internet. In addition, the CS 2000 can be used by shoppers in retail establishments and malls to scan bar codes on items of interest, capturing the item's description and price then downloading the information to an Internet web site for later retrieval.

Symbol provides application-specific mobile computing, wireless LAN communications for voice and data, and bar code data capture solutions. The primary competitors are Aironet Wireless Communications, Inc., BreezeCom, Inc., Casio Inc., Fujitsu, Ltd., Hewlett-Packard Company, Intermec Technologies Corporation, Lucent Technologies, Inc., LXE Inc., Matsushita Electric Industrial Co., Ltd., Metrologic Instruments, Inc., Motorola, Inc., NipponDenso Co., Nortel Networks, Opticon, Inc., Proxim, Inc., PSC Inc., Telxon Corporation, Teklogix Inc. and Welch Allyn, Inc.

Recent Events *In 1999,* Simon Property Group established two pilot programs using Symbol's CS 2000 (fastfrog.com) consumer scanner and the SPT 1700 (yoursherpa.com) mobile computing device. Under one pilot program, the CS 2000 is used by shoppers to scan bar codes on items and build a registry that the shoppers can then post to a personalized web page. The list can be organized and e-mailed to friends and family for gift-related occasions. In the second pilot program, the SPT 1700 mobile computing device allows mall shoppers to scan bar codes of items from multiple stores, pay for everything at one location and have the items picked-up from the stores and delivered as directed by the customer.

Financial Details

Price (5/12/2000)	$45.06
52 wk Hi-Lo	$69-$20
Shares Outstanding	133.01M
Float	131.16M
Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$30,128
Accounts Receivable, net	$252,140
Inventory	$216,709
Deferred Income Taxes	$44,794
Other Current Assets	$40,430
Property, Plant & Equipment, net	$206,116
Intangible Assets, net	$130,566
Software Development Costs, net	$64,883
Other Assets	$62,178
Total Assets	$1,047,944
Liabilities & Equity	
Accounts Payable & Accrued Expenses	$188,178
Current Portion LT Debt	$10,046
Income Taxes Payable	$15,559
Deferred Revenue	$18,805
LT Debt	$99,623
Deferred Revenue	$12,833
Other Liabilities	$62,440
Shareholders' Equity	$640,460
Total Liabilities & Shareholders Equity	$1,047,944
Income Statement* (000s)	
Revenues	$1,139,290
Cost of Revenue	($636,084)
Amortization of Software Development	($18,472)
Gross Profit	$484,734
Operating Expenses:	
Engineering Expense	($81,944)
Selling, General & Administrative	($220,753)
Amortization	($5,092)
Total Operating Expenses	($307,789)
Operating Income (Loss)	$176,945

* As of December 31, 1999.

Teligent, Inc. (TGNT)

www.teligentinc.com
8065 Leesburg Pike, Suite 400, Vienna, VA, 22182
Management Alex Mandl, Chairman/CEO; Cindy Talient, CFO

Description Teligent Inc. is a facilities-based communications company offering small and medium-sized business (SMEs) customers local, long distance, high-speed data and dedicated Internet services over digital SmartWave local networks. Teligent places a small digital microwave antenna on the roof of a customer's building. The signal travels over the building's inside wiring to Teligent's equipment and the rooftop antenna, which sends voice, data and video signals to a nearby Teligent base station, where the signals are communicated to a Teligent broadband switching center and then to their final destination. At the end of 1999, Teligent had installed "last mile" broadband network equipment in more than 3,000 buildings.

Strategy Teligent's local communications networks represent the integration of the latest advances in high-frequency microwave technology with traditional broadband wireline equipment. Each base station antenna gathers signals from a cluster of surrounding customer buildings, aggregates the signals and then routes them to a broadband switching center. At the switching center, ATM (Asynchronous Transfer Mode) switches and data routers distribute the traffic to other networks, such as public circuit-switched voice networks, packet-switched Internet and private data networks. Teligent's current domestic service territory encompasses more than 580 cities and towns with a combined population of more than 100 million. More than 80 of those cities have populations of 100,000 or more.

Teligent has created SmartWave DSL which is a two-way, high-speed data and Internet connection. Customers may receive many of the advantages of a fiber-optic connection from a small rooftop antenna. Teligent offers service using SmartWave local networks in 24 markets that comprise more than 405 cities and towns with a combined population of more than 75 million. Teligent is backed by equity partners such as Liberty Media Group, Telecom Ventures and Nippon Telegraph and Telephone. Telcom Ventures, LLC owns a majority of publicly-traded LCC International, Inc., one of the world's largest wireless engineering companies. Teligent has named Nortel (Northern Telecom) as its preferred equipment supplier and principal network integrator.

Teligent is considering international expansion, with partnerships formed in Germany, France, Spain, Hong Kong and Argentina.

Recent Events *In late 1999,* a group led by Microsoft and private equity firm Hicks Muse invested $500 million to expand Teligent's buildout of local broadband networks.

DBAB Analysts' Comments "Because we believe wireless can drive broadband access to the largest segment of the business market at speeds of up to 155 Mbps today (55% faster than Fast Ethernet), we believe the network computing model may in fact be dependent on wireless in buildings unserved by fiber or other high speed media (into which category the overwhelming majority of buildings fall). This is why we believe software developers would take an interest in wireless access...In the estimated 10,000-15,000 commercial office buildings with fiber access, speed is not an issue. In the remaining 700,000-plus commercial office buildings, there is no alternative to the incumbent (low bandwidth) copper network. Wireless is the best technology for achieving the 10-100 Mbps requirements to match up with the internal LAN speeds for the majority of small/medium businesses." *(Bo Fifer, "Wireless as Part of the Future Computing Paradigm," First Call note dated November 9, 1999.)*

Teligent

Financial Details

DBAB Rating	**Strong Buy**
Analyst	
Bo Fifer	
212 469 7240	
Price (5/12/2000)	$28.00
52 wk Hi-Lo	$100-$27
Shares Outstanding	32.78M
Float	29.9M

	1999A	2000E	2001E
EPS	**($9.94)**	**($12.09)**	**($9.25)**
Revenues (Mil)	**$13.3**	**$141.7**	**$370.6**

Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$440,293
ST Investments	$116,610
Account Receivable, net	$12,673
Prepaid Expenses and Other Current Assets	$17,914
Restricted Cash & Investments	$38,224
Property & Equipment, net	$402,989
Intangible Assets, net	$96,426
Other Assets	$6,714
Total Assets	$1,131,843
Liabilities & Equity	
Accounts Payable	$46,994
Accrued Trade Liabilities	$192,145
Accrued Compensation	$30,570
Accrued Interest & Other	$13,299
LT Debt	$808,799
Other Liabilities	$3,165
Shareholders' Equity	($441,917)
Total Liabilities & Shareholders Equity	$1,131,843
Income Statement* (000s)	
Revenues	
Communication Services	$31,304
Operating Expenses:	
Cost of Service	($207,358)
Sales, General & Administrative	($205,769)
Stock-based and Other Noncash Comp.	($31,451)
Depreciation and Amortization	($45,742)
Total Operating Expenses	($490,320)
Operating Income (Loss)	**($459,016)**

* As of December 31, 1999.

Tut Systems, Inc. (TUTS)

www.tutsys.com
2495 Estand Way, Pleasant Hill, CA, 94523
Management Matthew Taylor, Chairman; Salvatore D' Auria, CEO; Nelson Caldwell, CFO

Description Tut Systems Inc. designs, develops and markets advanced communications products that enable high-speed data access over the copper infrastructure of telephone companies, as well as the copper telephone wires in homes, businesses and other buildings. Tut Systems is the leading provider of multi-service broadband access systems for the multi-tenant unit (MTU) market. Tut's products include Expresso high bandwidth access multiplexers, associated modems and routers, XL Ethernet extension products and integrated network management software. Tut's proprietary FastCopper technology enables service providers to deliver high-speed data access to multi-tenant buildings. Tut's HomeRun technology, an in-home application of FastCopper, has been chosen as the initial specification for a home networking standard.

Strategy Tut's Systems commenced operations in August 1991. Tut's products allow service providers to offer broadband services to apartments, hotels, student housing, multi-tenant commercial buildings, and retail and business park environments. Home networks must be designed to allow the sharing of files, uninterrupted use of voice service, and sharing of Internet and remote corporate network access. Owners and managers of the hospitality industry have identified the need for high-speed Internet access and multi-service broadband access for their hotel guests. In business parks and corporate campus environments, distances and aging infrastructures can make the deployment of data connectivity and high-speed broadband services a challenge. However, the tenants in business parks and corporate campuses rely on high-speed Internet access and advanced communication services for their daily operations and communications. Tut provides solutions to any property type.

The residential MTU market, also known as the multi-dwelling unit, or MDU, market, consists primarily of apartments, hotels, and university dormitories. Data from the U.S. Census Bureau indicates that the domestic apartment market totals over 21 million individual tenant units, with 9 million units being located in buildings or complexes of 50 or more units.

Tut's Expresso systems provides bandwidth, firewall, e-mail, web server, and virtual private networking services that are managed by Tut, eliminating the need for a small business to hire on-site IT staff. Tut had two customers, CAIS Inc. (12% of sales) and Rycom CCI, Inc. (10% of sales), that accounted for over 20% of 1999 net sales.

The company's major competitors are Cisco, Copper Mountain, Nortel and Paradyne.

Recent Events *On March 16, 2000,* Tut was selected by BRE Properties to be the premier systems provider for Project Velocity, a suite of Internet applications, products and services designed to provide lifestyle solutions to apartment residents. Tut's Expresso is designed to dramatically lower network management costs and can manage multiple installations remotely from a single NOC.

On February 2, 2000, RYCOM Inc. announced a partnership with Cadillac Fairview and Bell Canada's subsidiary, Bell Nexxia, that will put Tut Systems and Motorola IP-based networking equipment into a North America-wide retail network. RYCOM partnered with Bell Nexxia to win the $30 million (US$20.83 million) project to install IP virtual private network services to Cadillac Fairview's retail properties across Canada and the U.S.

On December 9, 1999, Tut Systems and Allied Riser Communications, a leading service provider of broadband data, video and voice communications services for businesses in commercial buildings, announced the establishment of a broad strategic alliance.

Financial Details

Price (5/12/2000)	$45.06
52 wk Hi-Lo	$69-$20
Shares Outstanding	133.01M
Float	131.16M
Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$13,405
ST Investments	$18,831
Accounts Receivable, net	$11,742
Inventory	$8,401
Prepaid Expenses and Other Current Assets	$3,746
Property & Equipment, net	$3,476
Other Assets	$5,755
Total Assets	$65,356
Liabilities & Equity	
Accounts Payable	$5,859
Accrued Liabilities	$3,551
Lines of Credit	$1,529
Deferred Revenue	$770
LT Debt - Lines of Credit	$0
Deferred Revenue	$2,125
Shareholders' Equity	$51,522
Total Liabilities & Shareholders Equity	$65,356
Income Statement* (000s)	
Revenues	
Product	$26,266
License & Royalty	$1,541
Total Revenue	$27,807
Cost of Goods Sold	($15,459)
Gross Margin	$12,348
Operating Expenses:	
Sales & Marketing	($10,523)
Research & Development	($10,218)
General & Administrative	($4,429)
Amortization of Intangibles	($52)
Noncash Compensation Expense	($455)
Total Operating Expenses	($25,677)
Operating Income (Loss)	($13,329)

As of December 31, 1999.

Verio Inc. (VRIO)

www.verio.com

8005 South Chester Street, Suite 200, Englewood, CO, 80112

Management Steven Halstedt, Chairman; Justin Jaschke, CEO; Peter Fritzinger, CFO

Description Verio is a provider of comprehensive Web-hosting and Internet services, currently hosting more than 400,000 sites, with an emphasis on serving the fast-growing market of small and medium-sized businesses. Based on the number of domain names, like yourcompany.com, Verio is the largest Web hosting company in the world.

Strategy Verio offers a variety of services including Web site hosting on shared and dedicated servers at co-location facilities, application hosting services, e-commerce platforms, Internet connectivity through dedicated access, DSL access and dial-up access, domain name registration and virtual private networks to enable dedicated, secure transmission of private traffic. Internet access, Web hosting, electronic commerce services and application hosting services are among the fastest growing segments of the telecommunications services market. Verio's market presence in Internet access and Web hosting enables the company to provide high-quality and expandable service platforms which can be continually expanded and enhanced in order to provide an evolving range of business methods or processes to resolve Internet problems. Verio has established multiple proprietary Web hosting platforms, which allows Verio to host up to 2,000 Web sites on a single server in their most efficient platform. Verio is one of the largest registrars of .com, .net and .org domain names. Verio is currently in 41 of the top MSAs in the U.S. and in over 170 countries.

Verio's data centers are located in Orem, Utah; San Francisco and Moutain View, California; Seattle, Washington; Dallas, Texas; Boca Raton, Florida; Vienna and Alexandria, Virginia; Boston Massachusetts; Philadelphia, Pennsylvania and various other locations around the U.S.

Financial Details

Price (5/12/2000)	$57.88
52 wk Hi-Lo	$85-$23
Shares Outstanding	79.7M
Float	59.7M

Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$506,055
Securities Available for Sale	$358,969
Restricted Cash and Securities	$18,801
Trade Receivables, net	$32,642
Prepaid Expenses and Other	$14,386
Restricted Cash and Securities	$1,680
Investments in Affiliates	$8,957
Prepaid Marketing Expense	$17,247
Equipment & Leasehold Improvements, net	$205,130
Goodwill, net	$546,936
Debt Issuance Costs, net	$28,362
Other Assets, net	$24,559
Total Assets	$1,763,724
Liabilities & Equity	
Accounts Payable	$29,807
Accrued Expenses	$42,223
Accrued Interest Payable	$18,620
Line of Credit, Notes Payable & Current LT Debt	$945
Current Portion of Capital Lease	$15,447
Deferred Revenue	$24,800
LT Debt	$1,070,601
Capital Lease Obligations	$16,080
Other LT Liabilities	$12,078
Shareholders' Equity	$533,123
Total Liabilities & Shareholders Equity	$1,763,724
Income Statement* (000s)	
Revenues	
Internet Connectivity-Dedicated	$95,674
Internet Connectivity-Dial-up	$24,997
Enhanced Services and Other	$137,665
Total Revenues	$258,336
Operating Expenses:	
Cost of Service	($79,288)
Sales and Marketing	($60,623)
General and Administrative and Other	($126,987)
Depreciation and Amortization	($109,505)
Total Operating Expenses	($376,403)
Operating Income (Loss)	($118,067)

* As of December 31, 1999.

Webvan Group, Inc. (WBVN)

www.webvan.com
310 Lakeside Drive, Foster City, CA, 94404
Management Louis Borders, Chairman; George Shaheen, CEO; Robert Swan, CFO

Description Webvan is a full-service, online grocer and drugstore that provides free delivery, offering customers a convenient and affordable way to shop. Webvan is the first shopping service that incorporates the convenience of shopping online with a personalized courier service that delivers $50 minimum orders within a 30-minute window of the consumer's choice.

Strategy Webvan combines the ease and convenience of online shopping with high-quality products at or below supermarket prices. Webvan uses a "hub-and-spoke" distribution network, which centralizes the order fulfillment and decentralizes the delivery system, providing a more cost and time efficient process in conquering the last mile of e-commerce. Webvan's business centers around three main attributes:

- Infrastructure & Technology—a highly automated distribution center and state-of-the-art website to scalability and the opportunity to expand product offerings.
- Re-engineered Supply Chain—by removing the stores from the supply chain, Webvan creates greater efficiencies and benefits from higher margins.
- Familiarity—considering consumers shop twice a week and spend approximately 11% of their income on groceries, the frequency and reliability on the service creates trust and loyalty.

Webvan operates in the San Francisco and Atlanta markets. Webvan plans to roll out its delivery system in Chicago. Leases for distribution centers in New York City, Baltimore, Dallas, Orange County, Denver, Boston, Philadelphia and Washington, D.C. have also been signed

Webvan expects to build its highly automated distribution and delivery systems in 26 new markets over the next three years.

Recent Events *On April 12, 2000,* Webvan Group, Inc. announced three strategic business alliances with major consumer-products companies: The Clorox Company, Kimberly-Clark, and Nabisco. The alliances open new brand-building opportunities for the three consumer-products companies and allow Webvan to design a powerful and personalized new shopping experience for consumers.

On March 9, 2000, Webvan announced expansion in four additional markets with leases signed to service the greater Baltimore, Denver, Northern New Jersey, and Philadelphia areas.

DBAB Analysts' Comments "One of the most important metrics as to whether an e-merchant business model is economically viable or not is gross profit dollar contribution per order (this figure needs to be substantial enough to cover fixed operating expenses on a per-order basis). In 1Q, Webvan's gross profit dollar contribution per order equaled approximately $23 (up from $15 in 4Q99), which we feel is reasonably sufficient to achieve a profitable business model longer term...The Atlanta DC generates 200 orders/day currently, with official launch likely in early May...Cash balance of $540 mm is sufficient to scale existing operations and fund geographic expansion for the remainder of 2000, in our opinion...We believe that Webvan could face several primary risks, including the management of hyper-growth, the potential for slow customer adoption or brand dilution, the execution of a DC rollout/implementation program, access to capital, near term dependence on the San Francisco Bay Area, and the management of a scalable technology and logistics platform." *(Jeetil Patel, "Solid 1Q Results Ahead of Expectations," First Call note dated April 4, 2000.)*

Financial Details

DBAB Rating	**Strong Buy**
Analyst	
Jeetil Patel	
415 617 4223	
Price (5/12/2000)	$6.19
52 wk Hi-Lo	$34-$4
Shares Outstanding	328.98M
Float	238.08

	1999A	2000E	2001E
EPS	**($0.29)**	**($0.72)**	**($1.40)**
Revenues (Mil)	**$13.3**	**$155.3**	**$665.6**

Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$60,220
Marketable Securities	$578,561
Inventory	$1,508
Related Party Receivables	$320
Prepaid Expenses and Other Current Assets	$3,678
Property & Equipment, net	$99,978
Deposits and Other LT Assets	$13,528
Total Assets	$757,793
Liabilities & Equity	
Accounts Payable	$18,333
Accrued Liabilities	$16,030
Current Portion of LT Obligation	$4,306
LT Obligation	$12,147
Shareholders' Equity	$705,252
Total Liabilities & Shareholders Equity	$757,793
Income Statement* (000s)	
Revenues	$13,305
Cost of Goods Sold	($11,289)
Gross Profit	$2,016
Opearting Expenses:	
Sales & Marketing	($11,746)
Software & Development	($15,237)
General & Administrative	($92,406)
Amortization of Deferred Compensation	($36,520)
Total Operating Expenses	($155,909)
Operating Income (Loss)	($153,893)

As of December 31, 1999.

Wink Communications, Inc. (WINK)

www.wink.com
1001 Marina Village Parkway, Alameda, CA, 94501
Management Brian Dougherty, Chairman; Mary Wilderotter, CEO; Howard Schrott, CFO

Description Wink Communications provides a complete end-to-end system for low-cost electronic commerce on television. Wink Enhanced Broadcasting allows advertisers, merchants and broadcast and cable networks to create interactive enhancements to traditional television advertisements and programs. With a click of the remote control, viewers can utilize this free service to purchase merchandise, or request product samples, coupons or catalogues. Similarly, viewers can use Wink to access program-related information, such as news, sports and weather, participate in votes and polls, and play along with game shows. Wink allows viewers to access additional information about a specific news story from CNN Headline News or scores and statistics from ESPN, respond to an offer for telecommunications services from AT&T, or enter a virtual shopping mall which offers products for sale through dedicated interactive channels.

Strategy Wink's capability is currently available to viewers in cable markets in California, Connecticut, Illinois, Missouri, New York, Tennessee and Texas. When Wink is available, a small symbol appears on the viewer's television screen, indicating that the show or commercial is Wink enhanced.

Wink, which was founded in 1994, has been involved in developing and adapting their technology for operation in televisions and digital set-top boxes; licensing their Wink software tools to major broadcast and cable networks, third-party developers and advertisers to enable them to develop Wink Enhanced Broadcasting; developing a network to collect and manage the responses; marketing the concept; establishing relationships with and licensing their technology to key television industry participants.

Recent Events *On February 7, 2000,* General Motors, Kraft and Unilever signed agreements to air Wink-Enhanced Interactive Television Commercials.

In 1999, Microsoft invested $30 million in Wink for joint development and marketing.

DBAB Analysts' Comments "Wink enables one-click information requests and purchasing, resulting in revenue per click of $1.50 - $3.50. Wink's Enhanced Broadcasting system leverages the power of TV programming and advertisements to drive e-commerce opportunities with just a click of the remote control. Wink enhances TV with data and interactivity. Wink addresses a huge market opportunity in Enhanced TV and t-commerce with interactive content linked to TV programming." *(Statement by Larry Marcus.)*

"We believe there are five "killer apps," including 1) our favorite, the program guide, 2) Enhanced Broadcasting, 3) Virtual channel/walled garden, 4) Time-shifting (hard drive, video-on-demand, and streaming video) and 5) Communications services (e-mail, chat, instant messaging, and telephony)...The Deutsche Banc Alex. Brown golden rules for successful Enhanced TV companies include: 1) The service provider is the gatekeeper, 2) TV-centric implementation wins, 3) The power of the network is as crucial as the power of the set-top, 4) Don't underestimate one-way data, and 5) The devil is in the details-implementation and integration issues are real." *(Larry Marcus, "DBAB Enhanced TV/Broadband CEO Roundtable Conference Postview," First Call dated February 14, 2000.)*

Financial Details

DBAB Rating	**Buy**
Analyst	
Larry Marcus	
415 617 4202	
Price (5/12/2000)	$24.88
52 wk Hi-Lo	$75-$15
Shares Outstanding	30.57M
Float	26.14M

	1999A	2000E	2001E
EPS	($1.06)	($1.21)	($1.10)
Revenues (Mil)	$1.6	$6.2	$21.0

Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$58,032
ST Investments	$91,167
Accounts Receivable-related parties	$61
Accounts Receivable-third parties	$429
Prepaid Expenses-related parties	$375
Prepaid Expenses-third parties	$1,537
Property & Equipment, net	$2,538
Other Assets-related parties	$1.493
Other Assets	$177
Total Assets	$155,809
Liabilities & Equity	
Accounts Payable	$2,070
Accrued Expenses	$2,636
Deferred Revenue-related parties	$200
Deferred Revenue-third parties	$1,119
Current Portion Capital Lease	$365
Capital Lease Obligation	$0
Shareholders' Equity	$149,419
Total Liabilities & Shareholders Equity	$155,809
Income Statement* (000s)	
Revenues	
Licenses-related parties	$488
Licenses-third parties	$602
Services-related parties	$356
Services-third parties	$155
Total Revenue	$1,601
Operating Expenses:	
Cost of Service-related parties	($256)
Cost of Service-third parties	($63)
Research & Development	($10,381)
Sales & Marketing	($9,816)
General & Administrative	($4,657)
Total Operating Expenses	($25,173)
Operating Income (Loss)	($23,572)

* As of December 31, 1999.

Winstar Communications, Inc. (WCII)

www.winstar.com
685 Third Avenue, New York, NY, 10017
Management William Rouhana Jr., Chairman/CEO; Richard Uhl, CFO

Description Winstar is a facilities-based provider of telecommunications services, using wireless and enhanced communications services. Winstar offers its services in more than 70 markets throughout the U.S. and in Europe, Asia and South America. In the U.S., the markets include Atlanta, Boston, Chicago, Dallas, Los Angeles, New York City, San Diego, San Francisco and Washington, D.C. Internationally, Winstar has licenses in Argentina, Amsterdam, Brussels, Buenos Aires, The Netherlands, Tokyo, the United Kingdom and Japan.

Strategy Winstar's network consists of the largest amount of fixed wireless spectrum, covering more than 80% of the U.S. business market. Winstar is extending its broadband network across the "last mile" to their customers' buildings. The broadband services market is projected to grow from $178.0 billion in 1999 to approximately $360.0 billion by 2009. The total number of end-user buildings to which Winstar has access rights increased to over 8,000 at the end of 1999.

Winstar believes its fixed wireless infrastructure provides an optimal solution for delivering broadband capacity across the last mile. An average Winstar customer is serviced by placing a 10 to 12 inch digital microwave antenna on the roof of the customer's building. The customer's voice, data and video communications traffic travels from the customer's premises over the building's internal wiring to this rooftop antenna. The traffic is then routed via wireless transmission to another antenna located on a nearby hub site building which has a direct line of site to the antenna on the customer's building. The hub sites are typically located on their intracity fiber ring. Winstar has also acquired spectrum to licenses being granted by the government as well as through acquisition.

Winstar is involved in strategic partnerships that include a $2 billion relationship with Lucent and a $400 million agreement with Williams Communications. Agreements have also been signed with building owners, including Equity Office Properties, Highwood Properties, Pacific Gulf, Spieker, Tishman-Speyer, Mack-Cali Realty, Boston Properties, Crescent Real Estate, Parkway Properties and Glenborough Realty.

Recent Events *On February 23, 2000,* Winstar's Office.com purchased 80% of Individual.com, Inc., from NewsEdge. Individual.com, with one million users, is the world's leading provider of free, individually customized news and information that is delivered to businesspeople over the Internet.

On January 25, 2000, Winstar announced a non-exclusive arrangement to provide broadband access to the commercial buildings owned by Kilroy Realty Corporation. Kilroy's properties include 171 commercial and industrial buildings, with 12.6 million square feet predominately on the West Coast.

On January 19, 2000, Winstar announced a non-exclusive arrangement with Pacific Gulf Properties Inc., including 347 buildings with 10.9 million square feet, to provide high speed access.

On January 10, 2000, Winstar announced an investment of $50 million in WAM!NET with an option to invest up to an additional $50 million. WAM!NET is a leading global digital data management services company that helps customers leverage the Internet to convert their analog workflow to digital workflow. WAM!NET's growing customer base includes Time,Inc.; R.R. Donnelley & Sons Co.; Sears, Roebuck & Co.; Wal-Mart Stores, Inc.; Ford Motor Company; and Merck & Co., Inc.

On January 5, 2000, Winstar announced a non-exclusive arrangement to provide high-speed communication services to Glenborough Realty Trust, with 102 commercial and industrial buildings, comprising 9.7 million square feet.

DBAB Analysts' Comments "WinStar can drive broadband access to the largest segment of the business market at speeds of up to 155 Mbps today (55% faster even than Fast Ethernet)...we believe the network computing model may in fact be dependent on wireless in buildings unserved by fiber or other high speed media...Strategic backing is now secure...Nextlink has Craig McCaw/Forstmann Little, Teligent has Microsoft, Advanced Radio has Qwest, and on December 15 WinStar announced it has Microsoft." *(Bo Fifer, "Microsoft/Winstar to Deliver Broadband Services," First Call note dated December 15, 1999.)*

Financial Details

DBAB Rating	**Strong Buy**
Analyst	
Bo Fifer	
212 469 7240	
Price (5/12/2000)	$26.50
52 wk Hi-Lo	$66-$24
Shares Outstanding	85.65M
Float	63.51M

	1999A	2000E	2001E
EPS	**($13.80)**	**($9.222)**	**($7.78)**
Revenues (Mil)	**$445.6**	**$711.8**	**$1,039.7**

Balance Sheet* (000s)	
Assets	
Cash & Equivalents	$93,331
ST Investments	$152,640
Accounts Receivable, net	$139,725
Inventories	$18,194
Prepaid Exp and Other Current Assets	$86,930
Invest in Marketable Securities	$80,267
Property & Equipment, net	$1,793,982
Licenses, net	$317,386
Other Intangible Assets, net	$193,399
Deferred Financing Costs, net	$54,759
Other Assets	$134,680
Total Assets	$3,065,293
Liabilities & Equity	
Current Portion of LT Debt	$18,512
Current Portion of Capital Lease	$121,747
Accounts Payable and Accrued Expenses	$372,505
Deferred Revenues-Current	$11,699
Net Liabilities of Discontinued Operations	$3,996
Capitalized Lease Obligations	$179,600
LT Debt	$2,144,782
Deferred Revenues-Noncurrent	$164,238
Other Liabilities	$16,604
Deferred Income Tazes	$14,500
Shareholders' Equity	($414,102)
Total Liabilities & Shareholders Equity	$3,065,293

Income Statement* (000s)	
Revenues	
Core-Services	$234,799
Core-Enhanced Network Products	$121,274
Other Communication Services	$27,688
Information Services	$61,876
Total Revenue	$445,637
Operating Expenses:	
Cost of Comm Services	($196,487)
Cost of Enhanced Network Prod	($78,307)
Cost of Information Services	($41,468)
Selling, General & Admin	($426,679)
Depreciation & Amortization	($155,224)
Total Operating Expenses	($898,165)
Operating Income (Loss)	($452,528)

* As of December 31, 1999.

Brand Farm

www.brandfarm.com
330 7th Avenue, 11th Floor, New York, NY, 10001
Management Scott Galloway, CEO

Description Brand Farm develops and launches premier Internet service companies. Their business services companies provide Internet-related services such as consulting, software development, and infrastructure to any company interested in establishing a Web presence. Brand Farm's consumer-focused companies utilize the Internet to deliver consumer services that were previously unavailable in the marketplace.

Strategy Brand Farm uses speed-to-market, leadership and brand-building expertise to accelerate the growth of their service businesses. Brand Farm's structure, resources, and day-to-day involvement enables its subsidiary companies to get to market in less time and with a superior offering. The shared experiences and lessons of multiple companies, as well as extensive access to Internet and branding expertise is a source of competitive advantage.

Scott Galloway, the Founder and CEO, has a proven track record in developing pioneering online specialty retail and service companies, such as RedEnvelope. Prophet is a strategic management consulting firm driven by the belief that a company's brands should be regarded and managed as strategic assets.

Brand Farm companies include;

- Gold Violin, a resource for people in search of gifts and services for themselves, their parents or other older relatives;
- Room12, a travel site specifically devoted to the fast-growing yet unserved market of affluent adventurers;
- New Media Merchants, a service that provides focus and solutions to online retailers during the critical early ramp stages of development.